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**T**HIS number of CALIFORNIA AND WESTERN MEDICINE is increased in size by sixteen pages, making a total of one hundred and thirty-two pages. The House of Delegates will be requested to authorize making this temporary increase of space permanent. ¶ The complete program of the California Medical Association annual meeting, Los Angeles, May 12 to 15, 1924, is published in this issue. Make your plans to attend this meeting, and, most important of all, right now make your hotel reservations. ¶ The policy editorials in this number of the Journal have been presented to and approved for publication by the Executive Committee.

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No. 4

## ORIGINAL ARTICLES

### RESPONSIBILITY FOR STATEMENTS AND CONCLUSIONS IN ORIGINAL ARTICLES

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## SOME PRACTICAL SUGGESTIONS IN THE TREATMENT OF FRACTURES \*

By FRED R. FAIRCHILD, M. D.  
(From the Woodland Clinic)

So commonplace a discussion as that suggested by the title of this paper would almost seem to be out of place in an assembly of highly trained scientific men. Yet I do not feel that an apology is necessary. It has been my observation that, in the effort to keep abreast of all that is new and often spectacular in surgical diagnosis and treatment, the good old-fashioned fundamental to success is often crowded out. I refer to plain common sense—to the balance that enables one man to do exactly the right thing at the right time while another is confused by theories. Certainly in no branch of our profession are the practical qualities of the surgeon taxed to a greater extent than in the treatment of fractures, and certainly in no department do we oftener see the fruits of bad judgment. This is true, because fractures are treated by surgeons of all grades of distinction and, of necessity, in the rural communities, by medical men who make no claim to surgical ability. It is also true that fractures are the most common of all surgical problems and, as "familiarity breeds contempt," we fall into the habit of a too casual consideration of the case. We do not think. We treat the fracture as other

seemingly similar cases are treated, and often we go wrong, where a few minutes of careful consideration of the case as a separate problem would put us right.

The first practical general suggestion then, is to consider each fracture by itself. It is not enough to know that we are dealing with a Colles or a Potts or any other type fracture and then to proceed according to rule. Any of the classical breaks may have modifying factors of such nature as to make the routine treatment not right, but wrong. For example, even in a type fracture, the wrong relation of a small fragment to an articulating surface, or the apposition of two fragments of certain contiguous bones may mean a permanently deficient and painful joint. It may mean the loss of the rotating function of the forearm. Exact knowledge of the size and position of every fragment and its relation to the anatomical structures is fundamental. To state that this information can be had from proper radiographs and should never be neglected is academic. Yet the statement is not out of place, for we all know that the facts are that this information is often not so obtained, nor is it always considered indispensable. The wise surgeon never neglects so to safeguard his patient's happiness and his own reputation. He gets exact data and the factors of the problem all before him. Then is the time for some plain thinking, for the case is reduced to a more or less complicated problem in mechanics. There may be several possible solutions, but there is only one best way. Common sense, straight thinking, these alone enable one to select the proper course. These applied to each fracture case as an individual problem are the best guarantees for satisfactory results.

The next general suggestion is a warning against overenthusiasm for any one method. The young surgeon, particularly, is in danger of being carried away by the brilliant results of certain brilliant operators who are exponents of certain types of procedure. Fifteen years ago I was convinced that the application of metal plates and screws was the proper method for most open reductions. Then came gradual concession as to bands and other mechanical internal supports as deserving of consideration. Later the bone graft was the method of choice. Then came a time of open operation with replacement of fragments and no application of foreign material. Now we know that no method is the best; that all are good, providing there is judgment behind the choice and skill in its application. But more significant is this fact: that not one open

\* Presented to the Section on Surgery at the Fifty-second Annual Session of the California Medical Association, San Francisco, June, 1923.



reduction is now found necessary where five were done some years ago and yet the number of fractures seen is many times greater, all of which means that we are now thoughtfully fitting the method to the case and not the case to the method. And it is worthwhile to note in passing that failure to do this constitutes the most common-source error in fracture work.

So much for the general practical consideration of our subject. It may be worthwhile to be more specific. The Thomas splint, it seems to me, should stand at the top of the list of practical things in fracture work. It is a most remarkable fact that this splint should have been almost unused from the time of the Civil War to the recent great war, for this splint combines the ideal attributes of a splint as no other one does for the management of fractures of the long bones. The qualities of securing extension and fixation of the fragments with freedom of the body, exposure of the limb and fracture site, giving perfect ocular and X-ray observation enable us to handle with assurance those cases that formerly caused us much worry. And yet with the absolute proven and undisputed value of this simple contrivance, the Thomas splint is even now all too infrequently used. If our own experience may serve as a basis of judgment, we must conclude that the majority of those men who are treating fractures do not know the Thomas splint, or knowing of it, from lack of experience do not appreciate its values. If this splint is as generally valuable as we believe it to be, and if it is as little appreciated as we are led from experience to suppose, no more practical thing can be done than to discuss it from the standpoint of personal experience.

We may assume that the general principles of the splint are familiar to all—a ring adapted to receive counter-extension against the trunk, two long arms extending along the sides of the limb and united well beyond the extremity, from which point extension is effected. Now what are the practical points in its use? There are several that only experience will teach, for, as we before pointed out, each case constitutes an individual problem because of probable variation from the classical, and our text-books seem to have a habit of discussing just the conditions that do not fit our individual case.

Unless one is so situated as to be able to make selection from a large number of Thomas splints, it will be found better to have an ordinary blacksmith make the splint desired. This because satisfaction will be had only by a properly fitting splint, and the splint will be made to fit properly only when many factors in its construction are taken into consideration. For example, assume a thigh fracture, at or above the middle. We desire extension, abduction, and fixation. We must know the two angles the plane of the ring is to have in relation to the axis of the thigh. We will probably have to bring the upper part of the ring forward to avoid impingement on the crest of the ilium. We must have the diameter and shape of the ring such as to give us the greatest bearing surface in relation to the trunk; otherwise there is danger of pressure sores. The ring must be so padded as to insure

comfort and covered with a non-absorbing washable substance so that it can be kept sanitary without removal. The angle must be such in the shafts as to afford the desired flexion of the knee. The length of the thigh must be known to place this angle at the proper distance from the ring. Here, then, are many details to be considered and they are prosaic details, but very vital to the patient's comfort and to the ultimate result. An hour spent by the surgeon in knowing that all of these factors have been considered will be repayed a hundred-fold. In considering them it is perfectly obvious that the custom-made splint will probably not serve the purpose. Usually these factors will be properly met only when the splint is constructed to meet the known conditions of the particular patient.

The splint having been modeled to serve the purpose, what does experience teach as to its application? The splint is placed over the limb, which is held in a cradle made by strips of unbleached muslin of width corresponding to necessity, which are pinned under the limb from one shaft of the splint to the other. Extension is secured by wide moleskin strips placed longitudinally on either side of the leg from the knee down. To these tapes are attached. No immediate effort is made to reduce the fracture, but as much extension as can be easily tolerated is made continuously for from three to five days. At the end of this time, it will be found that full, and often, overextension has been secured and that also by reason of this factor, the soft tissue will generally have been drawn, by tension, from between the fragments. The X-ray now comes into play and, by its aid, the fragments are so manipulated as to secure satisfactory position. This can usually be done with little pain and without anesthesia, because of the very satisfactory extension which is still in force while the final reduction is being accomplished. Reposition being secured, the position is so held by wide muslin bands about the limb—above or below the fracture around the internal or external rod, under or over the limb according to the mechanics of the situation. As proof of the efficacy of the procedure is the fact that we have found it necessary to do no open operation on a fractured femur since the war, and we have no case the results of which cause us embarrassment. (We are not, of course, referring to old fractures, or fractures seen after partial union in malposition.)

All that has been said of the type of fracture taken as an example is applicable, with proper modification, to the treatment of fractures of the other long bones. In the lesions of the tibia and fibula, if not too low, a properly fitted and padded upper of a shoe makes an excellent attachment for the tape. In the ulna and radius—perhaps the most troublesome bones to hold in position after fractures—the method is ideal, for, in addition to extension, we can secure supination or pronation and maintain the position. Since the use of the Thomas splint in this type of fracture, we have found open reduction necessary in one case only.

It will be worthwhile to speak more specifically of some of the details mentioned in a general way in the preceding paragraph. A description of the splint was given, but of what material should it be



made? This would seem not to be a material factor, but, on the contrary, it is of very great importance. By experience, we have found that most of the commercial splints are constructed of unsatisfactory material. The rods for the long lateral portions are generally too heavy or made of iron that is not sufficiently malleable. These pieces must be strong enough to retain their shape under the strain of the extension, but not so stiff as to make bending while in position a hard task. It will often be found necessary to increase or decrease the joint angle to place the axes of the main fragments in proper alignment. This may easily be accomplished without removing or seriously disturbing the adjustment of the splint by the use of two wrenches placed above and below the point to be angulated if the shafts are made of three-eighths inch Norway iron. This material and size affords ample strength with easy moulding qualities. If, as so often happens, one-quarter inch iron or iron of poor quality is used, we will find it impossible to alter the shape without removal, a most unfortunate proceeding.

Mole-skin was suggested as the material to use for attaching the extension tapes. We have found it so much more satisfactory than any of the common adhesive tapes that they are now never considered. Under long extension other adhesive substances slowly but surely slip from the canvas, and extension is gradually lost. This in itself destroys its value. In addition, irritation of the skin is common. Mole-skin plaster has neither of these undesirable features.

When the Thomas splint is used on the lower extremity, suspension of the limb may or may not be found advisable. If suspension is desired, we use for this purpose a very simple home-made frame that may be attached to any hospital bed in five minutes. The frame is placed on the side of the bed desired. Suspension is secured by a pulley attached to the frame, and counter-weights just sufficient to balance the limb are used. The pulley is so placed as to make a downward pull on the entire splint, reducing, by just this much, the pressure of the padded ring on the trunk. This little point is worth noting, as it adds materially to the patient's comfort. Another minor but worthwhile point is to suggest that tapes of certain length be attached to the end of the splint in such manner that elevation and lowering of the limb will be limited to certain desired points only.

Compound fractures form the subject of another discussion. For lack of time we must pass the subject with the observation that these fractures, controlled by this method, are treated with a far greater degree of satisfaction than by any method of casts or encircling splints. The wound can be always under observation, and the danger and disagreeable features from secondary contamination very largely avoided.

Before leaving the discussion of the virtues of the Thomas splint, I cannot fail to mention another type of case in which it has proven invaluable to us. I refer to its use in the post-operative care of open operations on the long bones, the femur in particular. I think most of you will agree that the post-operative mechanics, as applied to open re-

ductions of thigh fractures, is quite as important and much more difficult than the original operation. How many times have we seen results that, judged from the immediate post-operative indications, should have been 100 per cent perfect, gradually change to failure or at least to conditions cosmetically or functionally less than satisfactory. The reason under old, though not obsolete methods—for they are still quite generally used—are obvious. Given a fleshy, well-muscled thigh that has been properly reduced by operation, a cast is applied in the most approved manner. What are the factors that endanger the final result? Strong, constant muscular tension which makes for bowing; a thick, soft muscular pad at the site of the point where angulation is possible; gradual atrophy of this pad from pressure; shrinking of all of the soft tissues within the encircling tube, giving more play than is desired; gradual angulation at the site of the fracture, and, not too infrequently, a fracture of the graft or plate or pulling out of screws, if one of these methods have been employed. Result unsatisfactory. If, on the other hand, the same plan as above discussed for closed fractures is followed, these unhappy results may be entirely eliminated; at least this has been our experience in some rather difficult cases.

The discussion would not be complete without some remarks relative to open-fracture reduction. The subject is so large and important that only those factors which personal experience has taught us of value will be mentioned.

First let us consider the elements in any given case that should decide for or against an open reduction of any type. We have stated that good radiographs give us the details that enable us to form a correct judgment. But, just as the X-ray enables us to know when operative procedure is necessary, so this very diagnostic aid, if not backed by sound surgical judgment, surely leads to many unnecessary operations. The shadow picture has a bad habit of exaggerating deformities. Also an approximation of fragments that casts anything but a seemingly satisfactory shadow may, after all, be of such relation as to guarantee a cosmetically and functionally perfect result. There is no justification for an operation in the fact that a radiograph is not beautiful, nor in the knowledge of the fact that by an operation we could secure a much more satisfactory one. If we have proper length and proper axial alignment with only partial approximation of the two main fragments in deeply covered bones, we should be satisfied, for there will be no deformity nor deficiency of function. The X-ray plate should be used as a basis of judgment. Too often it is the deciding factor for open operation without the mixture of horse sense earlier mentioned.

Given a fracture that must be reduced by the open method, what is the best procedure? In an earlier paragraph, we stated that no method was the best, that each case must be decided by its individual modifying factors. Certainly, the avoidance of any foreign material as applied to a bone is to be desired. By the use of the splint that we have been discussing, this is possible in an astonishingly

large number of cases. We formerly felt—and correctly felt—under old methods that internal support was generally necessary. We now find that, with the post-operative aid of the Thomas splint, reposition of fragments with removal of interposed soft tissues is usually all that is necessary.

As to ununited fractures: our personal experience aligns us with the rather generally accepted belief that, where the osteogenetic function is shown to be deficient, internal supports of foreign material had best be avoided. We have had the best results with inlays, either sliding or, preferably, of the massive graft type. Where non-union is due to malposition or interposing soft tissue, preventing the meeting of the osteoblasts from the distal and proximal fragments, our experience has not led us to feel that metal plates or other foreign materials are in themselves objectionable.

Finally, we feel that there is one type of fracture that too often results in deformity or functional deficiency. Fractures of the lower end of the humerus, badly comminuted, involving the joint, and often complicated by some form of elbow dislocation, are very common in children. I know of no radiographic plate that is more discouraging. Nor do I know of any seemingly bad fracture that can more certainly be satisfactorily corrected. Manipulation under anesthesia will sometimes be all that is required. If under anesthesia passive motion allows full smooth extension and flexion, and the X-ray is satisfactory, dressing the arm in the Jones position will be all that is necessary, together with patience in restoration of function after the arm is taken down. If passive motion cannot be made satisfactory under anesthesia, under free exposure the fragments should be replaced until this test is satisfactory. With no foreign material applied to the fragments, the arm should then be dressed in the Jones position, and post-operative attention be given as above suggested. Our experience by this method has been most satisfactory, and this type of fracture has lost its terrors.

#### DISCUSSION

**Harlan Shoemaker, M.D.** (Bank of Italy Building, Los Angeles)—I am impressed by the wonderful practicability and applicability in the use of the Thomas splint as presented by Fairchild. I am also of the opinion that Fairchild will get better results than the average individual using this device. One thing that occurs to me in the early application of the Thomas splint is the reduction of hemorrhage in the soft tissues. The Thomas splint is undoubtedly the greatest transportation splint that has ever been devised. The doctor speaks of the use of a padded shoe as an attachment for the tape in the reduction of a fracture in the tibia or the fibula. This I believe to be very dangerous. The Sinclair skate has some advantages as a traction anchor. Any substance on the plantar surface is always safe. Where there is continuous extension or any traction on the tarsal bones, it is more liable to produce necrosis and would be very dangerous. The Thomas splint, of course, has its limitations in the practice of surgery. The ring of the splint is very poorly adapted for the female. On the other hand, some prefer the use of casts. The cast should be applied, in most cases, loosely for bone alignment, and snugly for bone correction. It has been my experience with the Thomas splint that the patient is forced into a recumbent position during the entire

time of extension, while with a cast he may be turned at will and thus receive a great deal of rest and comfort from this manipulation. Personally, I prefer open reduction with a cast where there is practically no injury to the soft tissues. In very extensive injury to the soft tissues the open splint, with traction, is invariably used.

**J. F. Cowan, M.D.** (Lane Hospital, San Francisco)—In his excellent paper, Fairchild has brought out a number of valuable practical points in the treatment of fractures of long bones.

In the treatment of any fracture, common sense or straight thinking is of paramount importance, and it is just this that enables the bone-setter with crude apparatus to secure better end-results than are often obtained by a graduate in medicine with the latest improved splints and modern methods.

Another point which should be emphasized is that each fracture should be considered by itself, and that we should not become overenthusiastic about any one method, for no one method is applicable to the successful treatment of all types of fractures.

We have witnessed the advent and the partial or complete disappearance of Buck's extension, the double inclined plane, the Hodgen's splint, the Lane plate, bands, and various types of bone grafts, all of which have had and still have a limited application.

The late war has given added enthusiasm for the Thomas splint, largely because of its simplicity and the facility for transportation it affords; yet this splint has its limitations. The advantages of the Thomas splint are its extreme simplicity, its easy application, the little need of readjustment after reposition of the fragments has been accomplished, the fixation of the fragments in alignment, the ease with which compound fractures may be dressed, and above all the comfort it affords to the patient after proper adjustment. But it has its limitations as all other splints have. In fractures of the neck of the femur and fractures of the leg, while the Thomas splint may be used, other methods, I believe, are equally simple and more efficient.

In supra-condylar fracture of the femur, it is not possible to obtain adjustment and fixation of the fragments for permanent treatment by this or any other method in which traction is applied below the knee for the gastrocnemius, and plantaris muscles maintain the posterior displacement of the proximal end of the distal fragment.

Traction on the leg will only increase this displacement.

In these cases I have used caliper traction on the condyles with the leg flexed, the points of the calipers being engaged well toward the front of the condyles, never toward the back, for traction with calipers in the latter position tends to increase the displacement, while traction in the former position tends to correct it.

Dr. Fairchild's remarks concerning the application of the splint to the individual case are important.

Unfortunately, the village blacksmith has largely disappeared from our large cities, and we are, therefore, dependent upon commercial splints which, while adjustable, cannot be made to fit all cases.

The adjustment of the ring so that pressure is brought upon the tuberosity of the ischium and not on the pubis, and the position of the foot to prevent permanent shortening of the tendo Achillis and a stiff ankle-joint are important factors.

For fracture of the midportion of the thigh, there is no plan of treatment that causes as little discomfort to the patient as the use of this splint, when properly adjusted, and with the use of the Balkan frame with suspension and traction the results obtained surpass those of other methods.

**E. W. Cleary, M.D.** (177 Post Street, San Francisco)—Dr. Fairchild's paper is both valuable and

timely. Such discussions help us to remember and to give to others the results of the great war experience.

With modern methods of traction splinting at his command, the efficient fracture surgeon is operating on an increasingly smaller percentage of fractures.

I regard the Thomas leg splint as perhaps the single most valuable special appliance in the fracture surgeons' armamentarium. In my experience and observation, the standard United States Army Thomas splint may be efficiently applied to most cases of leg fracture in adult men of average stature. A splint specially made for each individual case, though desirable, is rarely necessary. In using the standard splint, where the size of the ring does not insure the maintenance of contact beneath the ischial tuberosity, such contact is maintained constant by suspension of the ring to a Balkan frame or other overhead suspension apparatus.

In fractures of the lower leg, especially compound fractures near the ankle-joint, traction from the sole of the foot has rendered obsolete the use of the Finocchetto stirrup, the pin through the os calcis and the always precarious and unsatisfactory methods of traction from one or another appliance encircling the ankle or foot. The tremendous and enduring adhesive capacity of celluloid-acetone solution has rendered traction from the sole of the foot both simple and sure of application.

I have found direct bone traction through caliper tongs applied to the femoral condyles, as mentioned by Cowan, of great value in cases of supracondylar fracture, fractures of the lower one-third of the femoral shaft and in some old non-unions of upper shaft fractures where much overlapping and shortening demanded very heavy traction. A particularly valuable feature of the caliper tongs is, that their use permits the knee-joint to be moved and frees this joint from the injurious effects of long continued traction strain.

Adjustable pressure pads clamped to the side-bar of the Thomas splint assist in reducing lateral displacements.

In my own practice, I have discarded the Spanish windlass except in emergencies. I now use a thumb-screw or turnbuckle for adjusting traction with a Thomas splint. By incorporating a small spring balance and keeping the balance registering a given number of pounds, I am assured of uniform tension upon the limb.

Any traction splint requires frequent adjustment. Eternal vigilance is the price of good results by conservative methods. Perhaps this is the reason some surgeons still seem to prefer other methods less efficient but more spectacular, and making a lesser tax upon the surgeon's time and energy.

**Dr. Fairchild** (closing).—The complimentary expressions of the gentlemen kind enough to discuss the paper are fully appreciated; the criticisms are accepted in the same spirit.

**Dr. Shoemaker** objects to the padded shoe as an attachment for extension as very dangerous. In trying to briefly conclude a paper which was growing too long, my brevity led to my being misunderstood. The padded shoe as a support for any case when heavy traction is required is dangerous and painful to the patient. It should never be used. I have made use of it in very low fractures of tibia and fibula where only moderate traction is required. Traction from the sole of the foot would be better.

**Dr. Cowan's** point in regard to the use of caliper traction on the condyles is of importance. I have, in low femur fractures, used it with great satisfaction. The principle is the same as the making of traction from a pin through the anterior portions of the condyles, but the trauma is less.

## CONGENITAL HYPERTROPHIC PYLORIC STENOSIS IN INFANTS \*

WITH REPORT OF FORTY-SEVEN CASES

By GUY COCHRAN, M. D.  
(From The Children's Hospital, Los Angeles.)

The earliest record of an example of this disease was unearthed by Osler, and is contained in "Cases and Observations by the Medical Society of New Haven," in the State of Connecticut, 1718, by Hezekiah Beardsley. The following history of the case is given:

"A child of Mr. Joel Grannis, a respectable farmer in the town of Southington, in the first week of its infancy was attacked with a puking, or ejection of the milk, and of every other substance it received into its stomach almost instantaneously, and very little changed.

"The feces were in small quantity and of ash color, which continued with very little variation till its death. For these complaints a physician was consulted, who treated it as a common case arising from acidity in the *prima via* the testaceous powders and other absorbents and correctors of acid acrimony were used for a long time without any apparent benefit. I was at first inclined to attribute the disorder to a deficiency of bile and gastric juices, so necessary to digestion and chylification, joined with a morbid relaxation of the stomach, the action of which seemed wholly owing to the weight and pressure of its contents, as aliment taken in small quantities would often remain on it, till by the addition of small quantities, the whole, or nearly all, was ejected; but his thirst, or some other cause, most commonly occasioned his swallowing such large draughts as to cause an immediate ejection, and oftentimes before the cup was taken from the mouth.

"A number of the most respectable medical character were consulted and a variety of medicines were used to little or no effect. His death, though long expected, was sudden, which I did not learn till the second day after it took place. This late period, the almost intolerable stench and the impatience of the people who had collected for the funeral prevented so thorough an examination of the body as might otherwise have been made.

"I next examined the stomach, which was unusually large, the coats were about the thickness of a hog's bladder when fresh and distended with air; it contained about a wine pint of fluid exactly resembling that found in the vesicles before mentioned, and which I supposed to have been received just before its death. The pylorus was invested with a hard, compact substance, or scirrhus, which so completely obstructed the passage into the duodenum as to admit with the greatest difficulty the finest fluid; whether this was the original disorder, or only a consequence, may perhaps be a question. In justice to myself I ought to mention that I had pronounced a scirrhus in that part before the child's death."

In 1904, Holt wrote that, "without surgical in-

\* Presented to the Section on Surgery at the Fifty-second Annual Session of the California Medical Association, San Francisco, June, 1923.



No.	Name	Sex	Age	Gas Wave	Adm.	Regurg.	Duration	Feeding	Weight Adm.	Weight Disc.	Cured	Died	Treatment
1	Henery, Howard..	M	8 wks.	Not stated	9-19-13	Yes	7 wks.	(Br. 1 wk. Art. 7 wks.	6 lb. 10 oz.		No	Yes	Feeding 2 days
2	Plushkel, Robt...	M	9 wks.	Not stated	3-8-14	Yes	Not stated	Artif.			Yes	No	Feeding
3	Vorhis, Dorothy...	F	5 wks.	Not stated	3-18-14	Yes	Not stated	Breast			No	Yes	Gastro-Ent.
4	Sax, Lawrence...	M	10 wks.	Not stated	8-7-14	Yes	7 wks.	Breast	8 lbs.	6 lb. 8 oz.	No	Yes	Pyloroplasty
5	Barton, Harry...	M	10 wks.	Yes	11-17-14	Yes	8 wks.	Breast	5 lb. 11 oz.	8 lb. 7 oz.	Yes	No	Gastro-Ent.
6	Coursey, Maurice...	M	6 wks.	Yes	1-2-15	Yes	Not stated	Artif.	5 lb. 11 oz.		Yes	No	Lavage
7	Arnold, Howard...	M	6 wks.	Not stated	4-6-15	Yes	5 wks.	Artif.	6 lb. 11 oz.	6 lb. 2 oz.	Yes	No	Gastro-Ent.
8	North, Melvin...	M	6 wks.	Yes	10-5-17	Yes	10 days	Art. 4 wks.	7 lb. 12 oz.	6 lb. 10 oz.	Yes	No	Lavage
9	Vorhis, Leon...	M	6 wks.	Yes	10-30-17	Yes	4 1/2 wks.	Art. 4 wks.	5 lb. 10 oz.	6 lb. 4 oz.	Yes	No	Lavage
10	Redman, Ella...	F	2 mos.	Yes	2-12-18	Project.	Not stated	Art. 4 wks.	7 lb. 13 oz.	6 lb. 5 oz.	Yes	No	Fredet-Rammstedt
11	Meehan, Edward...	M	2 mos.	Yes	9-25-18	Yes	3 1/2 wks.	Breast	7 lb. 7 oz.	7 lb. 1 oz.	Yes	No	"
12	Gilb, Merle...	F	5 mos.	Yes	2-11-19	Yes	2 mos.	Artif.	11 lb. 4 oz.	12 lb. 4 oz.	Yes	No	Lavage
13	Ray, Mary...	M	5 wks.	Yes	7-15-19	Project.	2 days	Breast	7 lb. 9 1/2 oz.		Yes	No	Fredet-Rammstedt
14	Young, Theodore...	M	10 wks.	Yes	9-28-19	Yes	38 days	Breast	8 lb. 11 oz.	9 lb. 16 oz.	Yes	No	"
15	Smith, Milton...	M	2 mos.	Not stated	4-29-20	Yes	1 mo.	Breast	7 lb. 3 1/2 oz.	6 lb. 13 1/2 oz.	Yes	No	"
16	Coules, Robt...	M	6 wks.	Not stated	6-25-20	Yes	Not stated	Breast	9 lb. 6 oz.	9 lb. 11 oz.	Imp.	No	Feeding
17	Sandau, Robt...	M	6 wks.	Not stated	1-27-21	Yes-proj.	2 wks.	Breast	4 lb. 14 oz.		No	Yes	Fredet-Rammstedt
18	Lytle, David...	M	3 mos.	Not stated	1-31-21	Yes	1 wk.	Artif.			No	Yes	Feeding
19	Aldworth, Robt...	M	2 1/2 mos.	Yes	4-21-21	Project.	1 mo.	Breast	10 lb. 15 oz.	9 lb. 10 oz.	Yes	No	"
20	Kingsbury, Don...	M	2 mos.	Yes	4-21-21	Project.	1 mo.	Artif.	7 lb. 10 1/2 oz.	7 lb. 7 1/2 oz.	Imp.	No	"
21	Walsh, Wm...	M	5 wks.	Not stated	6-14-21	Yes	10 days	Breast	6 lb. 2 oz.	6 lb. 1 1/2 oz.	Imp.	No	Fredet-Rammstedt
22	Lockwood, Jas...	M	5 wks.	Yes	6-14-21	Yes	2 days	Breast	7 lb. 10 oz.	12 lb. 12 oz.	Yes	No	"
23	Donrene, Lyle...	M	7 wks.	None	9-13-21	Yes	2 wks.	Breast	8 lb. 3 oz.	9 lb. 13 1/2 oz.	Yes	No	"
24	DePonce, Edmon...	M	7 wks.	Yes	9-13-21	Yes	2 1/2 mos.	Artif.	8 lb. 9 oz.	9 lb. 13 1/2 oz.	Yes	No	Feeding
25	Harris, Robt...	M	4 mos.	Yes	10-12-21	Yes	6 wks.	Breast	7 lb. 4 oz.	6 lb. 15 oz.	Imp.	No	Fredet-Rammstedt
26	Peterson, Carl...	M	3 wks.	None	10-17-21	Yes	2 wks.	Artif.	6 lb. 5 oz.	5 lb. 6 oz.	No	Yes	Feeding
27	Allen, Wm...	F	3 wks.	None	11-16-21	Yes	2 wks.	Artif.	7 lb. 7 oz.	8 lb. 2 oz.	Yes	No	"
28	Pratt, Virginia...	M	2 mos.	Yes	10-31-21	Yes	1 wk.	Artif.	6 lb. 6 oz.	7 lb. 14 oz.	No	Yes	Fredet-Rammstedt
29	McLoughlin, Sam...	M	1 mo.	Yes	11-18-21	Yes	6 days	Artif.	10 lb. 6 oz.	7 lb. 15 oz.	Yes	No	"
30	McLoughlin, Chas...	M	3 mo.	Yes	1-18-21	Yes	2 wks.	Breast	7 lb. 1 oz.	9 lb. 13 oz.	Yes	No	"
31	Campbell, Don...	M	5 wks.	Yes	1-15-22	Yes	10 days	Artif.	7 lb. 1 oz.	6 lb. 4 oz.	Yes	No	"
32	McConnechy, Ed...	M	5 wks.	Yes	4-17-22	Yes	9 days	Breast	8 lb. 7 oz.	6 lb. 13 oz.	Imp.	No	"
33	Campbell, Ralph...	M	5 wks.	Yes	5-22-22	Yes	7 days	Breast	8 lb. 5 oz.		No	Yes	"
34	Nourse, Jas...	F	1 mo.	Yes	6-26-22	Yes	3 wks.	Breast	8 lb. 9 1/2 oz.	7 lb. 3 oz.	Yes	No	"
35	Porter, Eileen...	M	10 wks.	Yes	8-18-22	Yes	2 1/2 mos.	Artif.	9 lb. 2 oz.	8 lb. 10 oz.	Yes	No	Feeding
36	Bier, Leo...	M	10 wks.	Yes	9-25-22	Yes	10 wks.	Artif.	8 lb. 14 oz.	8 lb. 14 oz.	Imp.	No	Fredet-Rammstedt
37	Gunn, Jack...	M	4 1/2 wks.	Not stated	10-31-22	Yes	2 1/2 wks.	Breast	8 lb. 1 oz.	9 lb. 1 oz.	Yes	No	"
38	Bradway, Judson...	M	1 mo.	Not stated	12-15-22	Yes	10 days	Breast	8 lb.	7 lb. 8 oz.	Yes	No	"
39	Bowles, John...	F	1 mo.	Not stated	1-26-23	Yes	11 days	Breast			Yes	No	"
40	Hackel, Pearl...	M	25 days	Not stated	4-9-23	Yes	10 days	Br. 1 wk.			Yes	No	"
41	Simon, Florence...	F	1 mo.	Not stated	5-9-23	Yes	6 days	Breast			Yes	No	"
42	Greenberg, Israel...	M	11 wks.	Not stated	5-4-23	Yes	6 wks.	Breast			Yes	No	"
43	Maier, Wm...	M	11 wks.	Not stated		Yes	6 wks.	Breast			Yes	No	"
44	Casper, Bruce...	M	11 wks.	Not stated		Yes	6 wks.	Breast			Yes	No	"
45	Whitney, R...	M	11 wks.	Not stated		Yes	6 wks.	Breast			Yes	No	"
46	Sanger, M...	M	11 wks.	Not stated		Yes	6 wks.	Breast			Yes	No	"
47	Long, Florence...	F	11 wks.	Not stated		Yes	6 wks.	Breast			Yes	No	"

tervention, the chances for recovery are small. With well-proved symptoms, laparotomy is justifiable, and in at least one instance has been successful." Then followed an increase of interest, and an occasional gastro-enterostomy was performed. But the mortality was high. In 1908, Fredet devised a much simpler and better procedure. In 1910, Weber, and in 1912, Rammsted, announced modifications of Fredet's technique. Now the one of general choice is called the Fredet-Rammsted operation.

**Pathology**—"The lesion of hypertrophic stenosis of the pylorus is hyperplasia of the unstriped muscle cells of the circular coat, while the connective tissue is not increased." A pyloric tumor is always present. It is usually about the size of an olive, though it increases with duration of symptoms. There are no adhesions about it. It is smooth, firm, ivory colored, and cuts like cheese. It encroaches upon the lumen of the canal, and produces an edema of the mucosa by pressure. Following operation by gastro-enterostomy the tumor remains: following the Fredet-Rammsted operation it disappears.

**Etiology**—There are many theories: it is probably a congenital overgrowth of muscle tissue. There is a case reported by Dent of one in a seven months' old foetus, and several have been seen in babies who died at birth. They are frequently associated with enlarged thymus glands, or other congenital defects—such as imperforate anus or club-foot.

**Diagnosis**—It is the history of mechanical obstruction—vomiting, which becomes projectile: this is followed by constipation, mucous stools and a rapid loss of weight. There is a visible active peristalsis from left to right. There is a palpable tumor at the region of the pylorus. This tumor can usually be felt, unless the pylorus lies too close to the liver edge. In the great majority of cases, the diagnosis should not be difficult, but in obscure cases aid may be given by fluoroscopic examination, especially when a tumor cannot be felt, and to distinguish between pylorospasm and stenosis; for we cannot believe with Haas that both are the same, and that it is a matter only of degree of spasm. We know that with hypertrophy we have spasm, but frequently, from various cases, we have spasm without hypertrophy.

**Treatment**—The treatment is logically medical, for there are all degrees of severity of symptoms in this, as in other pathologic conditions. Observation and medical effort is justifiable so long as the baby does well, or has lost not more than 20 per cent of its body weight, but the greatest number of these cases are not seen until late, and many almost moribund, when surgery is the only hope. That is why the mortality is so high, for many of these babies die of starvation—not of the simple surgical procedure.

**Operation**—There is a great variance of opinion regarding the anaesthesia. Many prefer to operate these cases under local, but it is not our experience—the babies squirm and cry—the intestines and stomach push out of the wound, and cause much annoyance and delay, and increase the shock to the patient. These little patients require little ether. The entire

operation should occupy only fifteen to twenty minutes, and we have seen no untoward effects from the general anesthetic.

The incision is upper right rectus. It should not be over two inches in length. The tumor is felt, and by the aid of a blunt, rubber-covered hook the pylorus is brought out through the wound. The tumor is incised longitudinally, along the bloodless area. This incision should be only deep enough to spread sufficiently so that a blunt instrument—preferably a straight forceps—can be inserted and blunt dissection carried on. The tumor tissue tears easily, and soon the gray mucosa is seen bulging upward. This dissection extends the entire length of the tumor, for if any bands are left the result is not accomplished. Sufficient width of muscle layer must be removed to allow the mucosa to bulge into the entire length of the wound. This is easy at the thickened gastric end, but care must be taken, for the duodenal end thins out quickly and is easily torn. We have never sutured any omentum, or done any plastic work to cover the mucosa. The abdominal wound is closed in tiers, and also with silkworm retention sutures, for these wounds need support for about ten days or two weeks.

In post-operative care, the babies are given glucose or salt solution by drip, or under the skin. Feeding is begun one hour after operation—a teaspoonful of warm water alternating with diluted breast milk every two hours. This is increased gradually until by the fourth or fifth day the child is receiving full feedings. Throughout the entire care of these cases the heartiest co-operation is required between pediatrician and surgeon.

Since 1914, we have had forty-seven patients at the Children's Hospital who fall into this group, thirty-three of whom were operated upon. Twelve of those operated upon died; twenty-one recovered; three of the operations were gastro-enterostomies. Of the fourteen others treated medically, two died.

Of the forty-seven patients, there were forty-two boys and five girls. The ages varied from five weeks to four months. Twenty-three were artificially fed; twenty-four were breast fed. Duration of symptoms varied from seven days to ten weeks. Those operated upon had all lost 20 per cent or over of body weight.

Our mortality is too high, and to assign the reason is one of the objects of this paper. Most of our cases are charity ones, and are brought to the hospital nearly moribund. In these we have operated as the only possible thing we could offer. None has died on the table, but several have gone on to death from starvation in a short time. The earlier cases were treated expectantly with atropine and feedings, and became surgical when such treatment failed. We have only lost one of this group with peritonitis due to faulty technique. The diagnosis is usually not difficult if physicians are on the watch. We have used no plates, and only occasionally the fluoroscope for aid in diagnosis. We would recognize more of these cases and save more of these babies if we would watch all sick babies with projectile vomiting, constipation, visible peristalsis, rapid loss of weight, and other usual symptoms of

obstruction. We should keep it in mind from the beginning that these cases may become surgical.

#### SUMMARY

We have the greatest admiration for the work of Downes, who gave such a stimulus to the study of the subject of Congenital Hypertrophic Pyloric Stenosis. His experiences have been corroborated in our work in many ways:

1. Ether anaesthesia is preferable to local.
2. The Fredet-Rammstedt operation is much simpler and more quickly performed than gastro-enterostomy, and therefore the best technique to follow in all cases.
3. In most cases the differentiation between pylorospasm and stenosis is clear, and only in questionable cases should fluoroscopic aid be resorted to. These little patients are too sick to be loaded up with barium unless it is absolutely necessary.
4. Cases under observation should not be allowed to lose too much weight before resorting to surgery; after loss of 20 per cent of body weight these cases become poor risks instead of good. Many come to us so late that we cannot avoid operation, but this is the chief cause of our high mortality. We lost most of our cases during the early years while we were doing gastro-enterostomies or working under local anaesthesia. There will be deaths under the most skillful care, but with the present simpler technique we hope for much better results in the future.

1136 West Sixth Street

#### DISCUSSION

**Emmet Rixford** (Stanford Medical School, San Francisco)—In his virile short sentences the author has well epitomized the salient points in the modern management of cases of congenital hypertrophic stenosis of the pylorus. I can only emphasize his statement that thorough co-operation of pediatrician and surgeon is essential, that operation should not be delayed if the condition is not soon ameliorated by the feeding of semi-solid food. The author's experience duplicates that of most surgeons, in that in many of his cases, more particularly the earlier ones, operation was too long delayed.

An important part of the operative technique should be swathing the child's limbs with cotton to lessen the loss of body heat, for these tiny mites are half-starved and chill easily, especially when ether anaesthesia is used. Many surgeons prefer chloroform if they happen to have anaesthetists who are experienced in using that drug. I would also add, some emphasis to the point that, in the Fredet-Rammstedt operation, it is very easy to open the mucous membrane of the duodenum. Any modification of technique which will save time is desirable, such as closing the abdominal wound with through-and-through sutures. For this I prefer silk, for it is less irritating to the child than silk worm gut unless it be very fine.

**E. C. Fleischner, M. D.** (350 Post Street, San Francisco)—The importance of an article which calls attention to the salient points in the management of hypertrophic pyloric stenosis in infants cannot be overestimated. There is no condition in infancy in which the successful outcome depends so much upon careful observation and logical treatment as in this disease. From the standpoint of the pediatricist it is unquestionably true that, in the hands of a skillful surgeon, early surgical interference is associated with more satisfactory results than indefinite procrastination and late surgery, even though the latter pro-

cedure may spare certain infants the necessity and risk of a laparotomy. This is particularly true in infants who are receiving breast milk, so much so that when a diagnosis of true stenosis has been made in a nursing infant, who, up to the onset of the disease, has been receiving an excellent mother's milk it is better to operate early and conserve the human milk supply than to temporize with various artificial foods, as a result of which the breast milk is lost and frequently operative interference required at a later date. There is one point in connection with the management of these cases to which particular attention should be called and upon which the greatest stress should be laid. Next to the importance of early operative interference in the successful treatment of these cases no one single procedure is as valuable as the plentiful supply of fluid to the tissues of these infants before operation. This is strikingly true in those cases that come to late surgery, but equally important before all laparotomies. These infants suffer as much from dehydration and perhaps even more so than from starvation, and it is possible to obviate the harmful effects of water privation by hypodermoclysis before operation, and in this manner improve tremendously the chances that the child has of recovery. It may be a dangerous generalization because of the difficulty in determining who is a good surgeon and who a mediocre one, but, in the hands of a capable man, early surgery will be productive of better results with less danger than temporizing and late surgical interference.

**Edward S. Ruth, M. D.** (6548½ Hollywood Boulevard, Los Angeles)—In discussing this paper I would like to confine my remarks to a possible etiological cause of hypertrophic pyloric stenosis.

In all series of hypertrophic pyloric stenosis cases, two factors stand out above all other symptoms and observations. First an overwhelming majority of cases occur in the male infant. In all series from 83 per cent to 95 per cent are in the male. Second, it is a disease which has its onset of symptoms from birth or soon after. These two factors it seems to me are significant from an etiological standpoint. Heretofore the etiological cause has been attributed to some nerve entity that, in some way, was responsible for the enormous overproduction of smooth muscle fibers about the pyloric end of the stomach. A great deal of experimental work has been done by Strouss, Trumpeier, and Bernstein by mechanically obstructing the pylorus, but nothing has been accomplished except for reproducing the classical symptoms of hypertrophic pyloric stenosis.

Scammond, in some of his weight and growth curves of the various organs of the foetus and post-natal life, showed rapid and enormous growth of the uterus up to the time of birth. After birth there is a rapid subinvolution and decrease in the size of the uterus, and its growth that was attained at the time of birth is not again reached until much later in life. This apparently indicates that we have something that stimulates smooth muscle growth during pregnancy. This I have termed a smooth muscle activator.

If the hypothesis is correct that the prenatal growth of the uterus is due to smooth muscle activator, then we may have the same muscle activator at work in the wall of the uterus of the mother, producing the enormous hypertrophy and the hyperplasia that takes place during the period of gestation. Now, assuming that we have a smooth muscle activator at work during pregnancy, I believe that this same activator may also produce hypertrophy and hyperplasia in the smooth muscle in the pylorus and stomach. This is the only place in the human body where we have a large accumulation of smooth muscle fibres. For some time it has been pretty definitely known that the hypertrophy of the pylorus is a prenatal growth, inasmuch as several have been reported in foetuses of seven months of age. Also Kerley reports one in an infant three



days of age. Again, surgeons who have operated upon infants with pyloric stenosis have also suggested that this enormous hypertrophy must begin in prenatal life, because it seemed impossible that such a growth could take place in a few weeks or a few days' time.

This explanation is, of course, hypothetical, but I believe that it has merit.

**Chemical Foundation Wins (Propaganda for Reform)**—During the late war, our Government seized many German patents on synthetic drugs. Later the Alien Property Custodian, on executive order of President Wilson, sold 4700 German chemical patents to the Chemical Foundation, Inc. This corporation agreed in turn to license any American firm that could present evidence of reliability in chemical manufacture to manufacture under these patents. As a result of this action, physicians may today obtain different brands of arsphenamin instead of one proprietary "salvarsan"—and at competitive prices. The same is true of other useful synthetics. About a year and a half ago, President Harding instructed the Alien Property Custodian to take steps to secure the return of all patents sold to the Chemical Foundation, Inc., on the ground that the price paid was inadequate and the transaction illegal. Suit was instituted by the Government against the Chemical Foundation, Inc., for the recovery of the patents. The suit was won by the Chemical Foundation, Inc. In the decision of the court, it was held that the price was adequate, for the reason that many of the patents were non-workable and that, therefore, because of the financial risk and hazard, the value of the patents "was too slight and problematical to warrant the payment by American citizens of a sum even remotely approximating what they might have been worth to the German owners for their monopolistic purposes." Hence, the bill of complaints filed by the Government was set aside. (Journal A. M. A., January 12, 1924, p. 130.)

**A Medical History Society**—An organization meeting of medical men and others interested in Medical History was held on Saturday, March 15, at 8 p. m. The meeting was called to order by Doctor Ophuls in the new quarters of the historical section of the Lane Medical Library, on the third floor in the library building.

Emmet Rixford was elected temporary chairman and Henry Mehrtens secretary. Doctor Ophuls outlined the origin of the historical library, calling attention to the latest large addition of books. These were procured by the efforts of Adolph Barkan from Prof. E. Seidel in Meisen, and include 5000 old manuscripts and rare medical books. Continual additions of old and rare medical books are being made to this collection.

It was the opinion of those present that such a society should consist not only of medical men interested in the history of medicine, but that specialists in the allied sciences would also find interest and profit in this collection.

A committee, consisting of Doctors Ophuls (chairman), Evans, P. K. Brown, Hyman and Kerr were appointed to formulate a draft of the organic laws of the society and to get in touch with members of the profession and others who are interested in its ends.

**Voltaire's and Frank Crane's Estimate of Physicians Compared**—Voltaire once said that "Doctors were men who crammed medicine, about which they knew little, into bodies about which they knew less, to cure diseases about which they knew nothing." Dr. Frank Crane says that regular physicians have done, and are doing more for the human race than all the cults, fads, quacks and pathies put together.—Boston Medical and Surgical Journal, March 6, 1924.

## PERFORATIVE APPENDICITIS—APPENDICECTOMY VERSUS DRAINAGE\*

By S. M. SPROAT, M. D., Portola, Calif.

In acute perforative appendicitis, with definite abscess formation, there is great temptation to remove the offending member, too often to the detriment of the patient. With a well-walled-off appendiceal abscess, the appendix lying at any portion of its length outside the wall, it is far better surgery to drain the cavity and leave undisturbed the appendix. In the free cases, where nature has made no attempt at limitation of the infection, it is better to remove the offending member, where this can be easily accomplished, but, where protecting walls must be broken down, tissues traumatized with extensive handling, and the infected material disseminated widely, such a procedure is not to the best interests of the patient.

In the cases reported, the following technique was generally employed. The abdomen and anterior rectus sheath was opened over a mid-rectus incision, and the intact muscle freed from its sheath and pulled toward the mid-line. Then, without injury to the muscle, the posterior sheath was opened in the same line as the anterior, and the peritoneum in the same location. When the abdomen is later closed, the intact muscle serves as a support to the abdomen and tends to prevent the herniae, which are so common in these cases. On entering the abdomen, when the omentum was encountered, it was always kept to the left, and the exploration was conducted as low down to the right as possible. Gauze-packs were not employed within the abdomen unless absolutely necessary, but only served to keep the omentum pressed well to the left side of the incision, and thus saved the tissues additional trauma. On encountering an abscess wall, a stitch or two was often placed in the omentum to hold it temporarily to the abdominal wall. The abscess cavity was then entered from its lowest possible point on the right-hand side of the abdomen.

The cavity was carefully explored with the gloved finger and the appendix located from within the abscess cavity itself. Should it lie without the walls in any part, it is in nowise disturbed. The walls of the abscess are also not disturbed in any way. The cavity is thoroughly and carefully explored to determine the presence of any concretion or foreign material that may have been extruded from the appendix. If any such is found, it is removed. There is no irrigation attempted, and it has been my unflinching experience that the more thorough the attempts at cleaning the peritoneum and the more extensive the operative measures in these cases, the poorer the prognosis for the patient.

We all are aware that infection and localized abscess not infrequently follows difficult clean cases that require long and tedious removal of a non-perforative appendix. It is my firm belief that the handling and disturbing of the bowels, omentum, and abdominal contents that is necessary to remove an appendix in abscess cases very often leads to the

\*Read before the Twentieth Annual Meeting of the Nevada State Medical Association, Reno, September, 1923.

death of the patient a few days later. In inserting drainage, several points must be noted. First, to drain through a stab wound at the lowest possible point of the cavity. Second, to institute drainage to the portion of the appendix lying within the cavity. The closer to the right the drainage is placed and the freer the initial drainage, the shorter the convalescence.

The disadvantages that are given to this conservative method are, first, that about 20 per cent require secondary operation for the removal of the appendix, as, in this number, further appendiceal trouble is noted after recovery. Second, convalescence is retarded. In regard to the first objection, the removal at an opportune moment may be accomplished at slight surgical risk to the patient, and Murphy has demonstrated that such appendices are usually little more than fibrous cords. Convalescence is usually much more rapid in such cases, if the surgeon is prepared promptly and properly to open up any new abscess cavities, which occasionally develop. The tubes are preferably soft cigarette drains, a large one to the abscess proper and a smaller one contiguous to the appendix, and another through the stab wound to the lowest point of the cavity. Drainage is usually favored by lying on the right side in a semi-Fowler position. It is very important to overcome tissue dehydration by interrupted proctoclysis, hypodermoclysis, and intravenoclysis, and this is forced to tissue saturation during the first forty-eight hours.

Haggard had to reoperate such cases and remove appendix at a later date in about 20 per cent, and this percentage has almost coincided with mine. In other words, such an appendix, when properly treated and drained, will give no further trouble in 80 per cent of the cases. The fact that so many of these cases so treated recover after stormy convalescence convinces one that even a small amount of added operative trauma would have caused death. This added trauma is given when the appendix is removed. Better a safe secondary operation in 20 per cent than a dead patient. The method of Petit, in allowing the right lateral abdominal wall to form one side if possible, has been followed. The risk of post-operative hernia, which runs from 12 per cent to 15 per cent in these cases, is minimized as follows: There is no drainage made through the operative wound that is not carried through the split fibres of the rectus muscle. This, I believe, is the great advantage of this incision over the outer rectus incision, and it has been described by Eliot, Ellsworth, and Pickhardt.

I recently operated upon under this method, by local anaesthesia, a man 72 years of age, with a systolic blood pressure of 180 and glycosuria, with recovery. I am convinced that, had adhesions which were present been torn or seriously disturbed, death would have resulted instead of recovery within four weeks. To have removed the appendix, it would have been necessary to seriously disturb these adhesions.

The following is a list of cases operated in the past four years by this method, with time of hospitalization. In these cases, the appendix was allowed to remain and drainage only was instituted.

Mrs. S. B., 18 days; V. K., 17 days; J. L., 25 days; Mrs. W. L., 46 days; C. A., 19 days; F. F., 46 days; W. S., 21 days; M. F., still in hospital; G. T., 27 days; J. H., 47 days; T. A., still in hospital; C. J., 36 days; H. R., 33 days; L. A., 48 days.

Upon three of the above, the appendix was later removed. In one, there was a post-operative hernia, which was repaired. One, after being passed for life insurance, was later operated upon in another hospital for secondary abscess, and the appendix was removed, with death. Average length of hospitalization, 31 days; mortality, none died; 12 operated upon under ether anaesthesia and two under local; one had a fecal fistula, which closed spontaneously.

#### CONCLUSION

In definite well-walled-off abscess cases of perforative appendicitis, with the appendix lying outside of the abscess walls, the mortality will be lower and it is safer not to remove the appendix.

#### DISCUSSION

Horace J. Brown (Thoma-Bigelow Building, Reno, Nev.)—Whether to remove the appendix in these cases, or not, seems to be a question open to much discussion. In my own experience, it has been a puzzle whether to leave the appendix and drain, or remove the appendix and drain, with drainage being the only part of the procedure that I feel sure of. I have broken up adhesions in order to remove necrotic appendices, put in generous drains, and had so many good results that I felt confident that that was the method of choice until disaster overtook me and two or three such patients were lost in succession; then I would change to drainage only and feel very secure as long as all got well, but when disaster again overtook me I would change back again. Just at present I am on the "removal" side of the fence, but cannot say that I feel real secure there. Seriously, I believe that the whole problem depends upon the nature and severity of the infection. If we have an abscess, perforated or necrotic appendix that is caused by staphylococci, or colon bacilli as the predominating organism, then I think we can either remove the appendix, breaking up many adhesions in order to do so, or we can simply drain, with the accent on the "drain," and our patients will have a good chance of recovery; but if we have a streptococcal infection to deal with, and it is of the virulent type, I believe that a large percentage of such cases will die, regardless of the treatment used. I have become thoroughly convinced of the value of adequate drainage and believe that too many of us are prone to use drains that are more ornamental than useful. I believe that our patients will fare better if we use large, loosely packed, cigarette drains, and plenty of them, in all pus cases, and I know that I can sleep better when I know that I have an ample drain in any doubtful case.

R. A. Bowdle, M.D. (East Ely, Nev.)—So far as I can recall I have never operated for acute appendicitis without removing the appendix. I see a great many ruptured appendices. It seems to me that, with careful attention to the operative technique, you can remove the appendix with no greater trouble than that incurred in thoroughly exploring the abscess cavity with the glove-finger. I believe that every appendicular abscess should be walled off from the general peritoneal cavity by means of gauze strips. For this purpose I use a gauze packing about one inch wide and twelve inches long; these are moistened, and can be so arranged that, with a minimum of trauma, they will protect the remainder of the abdominal cavity. I think that the rough handling of tissues and the lack of knowledge in knowing

how to reach the caecum is responsible for many deaths that could otherwise be avoided. In the matter of drainage I firmly believe that it is better to drain a case that is questionable than to close one up that subsequently develops an abscess. In addition to the sites of drainage which Sproat uses, I invariably place a cigarette drain down into the right pelvis; this is particularly necessary where you are using the Fowler position following operation. Another very important point in the handling of these cases is the saturation of the patient's system with fluid. As has been so well shown by Crile, this can best be accomplished through hypodermoclysis. My routine is to give the patient at least 3000 cc. during the first twenty-four hours—he is kept well morphinized and in a Fowler position. I use practically the same incision which Sproat describes; occasionally in clean cases in children or young males I will use the muscle-splitting incision of McBurney.

**Robert R. Craig, M.D.,** (Tonopah, Nev.)—More than half of my acute appendicitis cases are ruptured. I have never operated without removing the appendix, and so far have had no catastrophes traceable to this procedure. By gentle, careful technique most appendices can be located, isolated and removed without evisceration or contamination of the whole abdominal cavity. I see no advantage in the right rectus abdominis incision and often the disadvantage of opening into the free peritoneal cavity, instead of into the main objective, for one can to better advantage explore the abscess from the inside than from the outside. I prefer the right external incision, as far out as possible, sometimes opening directly into the abscess extraperitoneally. Through this incision one follows the leads, edematous peritoneum, omentum, and inflamed bowel, and by palpation reaches the abscess cavity, which is evacuated; and explored with the gloved finger, the appendix located and isolated with as little disturbance of protective walls as possible; often when the caecum is adherent the appendix is removed without drawing it into the incision. Three drains are used, one at least a cigarette or rubber tube, placing one in the pelvis, one to the stump of the appendix, and one high to upper limit of infection among the coils of inflamed intestine and omentum. If any part of the appendix lies without the abscess wall, the abscess is usually a very small one and at no point adherent to anterior parietes.

**Dr. Sproat** (closing)—I believe that conservatism, in not breaking down protective barriers to remove the appendix in acute cases where such barriers exist, is coming into more general usage. The more virulent the infection the greater the need for the absence of tissue trauma, and breaking down natural protective walls. In the majority of these cases the appendix extends outside of these walls, and they are notoriously difficult of removal, even with the greatest possible care.

Lower and Jones of Cleveland, in their paper read before the Section on Surgery, general and abdominal, at the American Medical Association meeting last June, state as follows: "The high operative mortality in cases of acute appendicitis and the post-operative morbidity in cases of chronic appendicitis are, in our opinion, due in large measure to the common belief that in each case the only proper procedure is removal of the appendix." And again, "In acute appendicitis we would emphasize our own adherence to the procedures outlined, and to Crile's principle of confining the primary operative procedure to incision and drainage only; if the appendix is not readily accessible, the removal of the appendix and such other exploration as may be necessary being deferred until the acute state is past."

Since this paper was read, I operated upon a patient with an acute fulminating infection which caused rupture and abscess in thirty-six hours of onset, and within twenty-three days the incision had closed and he had left the hospital. From past experiences with removal, convalescence, I am sure, would have been a stormy one had this been done.

## KIDNEY AND URETERAL STONE SURGERY\*

By HERMAN L. KRETSCHMER, M. D., Chicago

In presenting for your consideration the problems of kidney stone surgery, I have thought it advisable not to dwell at length on the technical side of the subject nor to burden you with the reading of statistics, but to present some of the difficulties and some of the problems encountered in our everyday work.

It is also advisable, when considering this subject, to include stones in the ureter, since some of the problems of diagnosis and many of the clinical symptoms are present both in kidney stone and stone in the ureter to such an extent that at first an absolute differentiation between them from the clinical history alone is not possible.

At one time it was the opinion that kidney stones, as well as renal infections, were rare in women; but recent intensive studies of this subject have completely disproved this. Not only do kidney and ureteral stones occur in women, but they occur much more frequently than has hitherto been supposed. This applies also to the frequency of occurrence of renal infections. In fact, if certain renal infections which occur only in women are considered—such as pyelitis during and after pregnancy, the greater number of cases of pyelitis of infancy among girl babies as compared with boy babies, the frequency of kidney infections either immediately or remotely after gynecological operations, as well as these infections associated with pathological conditions of the female pelvic organs, one may safely say that kidney infections occur much more frequently in women than in men.

Kidney stone, according to custom, is generally associated with a so-called classical history of renal colic. Not infrequently, however, kidney stones run a silent course. At times there may be no subjective symptoms suggestive of renal stone; again, the only manifestation may be the presence of pus in the urine, and this may be very slight or even absent. As examples of cases in which kidney stones were found, though not suspected, I would like to mention briefly just a few instances. One of our patients complained of frequency of urination, which, because of his age, he attributed to his prostate gland. The final diagnosis was carcinoma of the colon, which necessitated a colostomy for obstruction. Roentgen-ray examination revealed a large stone in the kidney.

Another patient, suffering from tabs for many years, had urinary incontinence. Roentgen-ray examination showed a large solitary kidney stone.

A young woman had the symptoms and signs of renal tuberculosis, the diagnosis being substantiated by means of the cystoscope and the ureteral catheter. A routine Roentgen-ray examination revealed a stone in the tuberculous kidney.

A man of 70 came to the office to have one of his periodical recurring attacks of cystitis treated by vesical irrigations, as had been his custom for many years. Routine Roentgen-ray examination showed

\*Read before the Utah State Medical Association, June 22, 1923.



multiple stones in the kidney. Many more cases of this character could be cited, but I believe these few amply illustrate just what is meant by silent stones. No doubt there are many cases of this kind overlooked.

Stones having their origin in the kidney may have one of the following four terminations:

1. The stone may remain in one of the kidney calyces or in the pelvis.
2. The stone may enter the ureter, and in its course become lodged. This usually occurs with predilection at one of the physiological constrictions of the ureter.
3. The stone may pass from the ureter into the bladder, where it may remain and become the nucleus of a bladder stone. If a careful history is elicited in cases of vesical calculi, it is highly probable, in a certain percentage of cases, to obtain a history of a previous attack of renal colic. This may have occurred many years before, so that the patient may have quite forgotten it, unless his attention is specifically called to the fact.
4. The stone may be voided by the patient.

The present high plane which has been attained in the surgical treatment of renal calculi is a more or less direct outgrowth of the accurate methods of diagnosis which are at our command. Briefly, they are: The Roentgen ray, the cystoscope and ureteral catheter, the shadowgraph catheter and pyelography, and functional kidney tests.

Undoubtedly, the single factor which has contributed most to the diagnosis of kidney and ureteral calculi is the Roentgen ray. Its field of usefulness in this work is enriched by the simultaneous employment of the Roentgen ray and the cystoscope, made possible by the introduction of the shadowgraph catheter and pyelography.

While it may be possible, in a large number of cases, to make a diagnosis by means of the Roentgen ray alone, there will always remain a certain number of cases in which pyelography, or the shadowgraph catheter, or both, must be employed. For example, in cases of stone occurring in the renal pelvis, no positive diagnosis can be made without the employment of one or both of these additional aids. The value of the shadowgraph catheter in the diagnosis of stone in the renal pelvis and other conditions has been previously reported.

Not only is the Roentgen ray of value in the diagnosis of calculi, but it is of inestimable importance in watching the progress of a calculus through the ureter. Another example in which a combination of methods is of value is illustrated in cases in which a stone in the renal pelvis or ureter does not show plainly in the roentgenogram. If a solution of collargol is injected into the pelvis or ureter and a second picture is taken, the stone will appear very distinctly on the plate.

In employing the Roentgen ray, it is of prime importance to remember that the exposure should include both kidneys and both ureters. The value of this procedure is apparent when the frequency of bilateral calculi is recalled, as well as the possibility of the presence of stone in one kidney, and the occurrence of one or more stones in the ureter

of the same or opposite side. The importance of this procedure is also apparent in cases in which a nephrectomy has been performed for stone, and the patient afterward returns with a stone in the remaining kidney. Under such untoward circumstances it is of more than academic interest to ascertain whether the stone was present before the first operation or whether it formed subsequently.

#### LIMITATIONS OF THE ROENTGEN RAY

Perhaps the greatest source of error is due to failure to interpret the shadows correctly, and not to failure to demonstrate shadows in the Roentgen plate. As is well known, there are many shadow-producing bodies located outside the urinary tract, which are often interpreted as due to lithiasis. This occurs most frequently in cases of suspected ureteral calculi. The frequency with which patients are sent to a hospital with the diagnosis of stone in the ureter and in which the patient or his physician proudly points to a small shadow as being the offending stone, is known to all. The occurrence of these shadows should always be borne in mind, and when there is any doubt as to their nature and location, the shadowgraph catheter should be employed. Although in a large number of cases this procedure is of assistance, there remain, unfortunately, a small number of cases in which even this method fails to give the desired information. It is my opinion that this small percentage can be reduced still further by resorting to a procedure, previously described, in which a double exposure upon a single plate is made with a shift in the tube.

The routine use of the Roentgen ray after operation for renal stone has not become an established procedure, although it deserves to be. While this procedure will often put the surgeon in the embarrassing position of showing that he has failed to remove all the stones, it will, on the other hand, yield data which will have a direct bearing on the percentage of recurrences, a subject which at present is deserving of closer study than it has received in the past. I can recall several instances in which there is no doubt that all the stones were not removed at the primary operation, but nevertheless were classified under recurrences, thereby belittling the operation.

Not infrequently the Roentgen ray fails to yield the desired information. This may be due to the following factors:

1. The inherent limitations of any diagnostic measure.
2. Errors in the Roentgen technique due purely to the roentgenologist.
3. The calculus may be situated in so peculiar a manner that it is overlooked when the plate is read. This occurs when a small calculus is situated behind the rib, over a transverse process, over the ilium or when the plate is so placed that the stone comes just at the edge of the plate.
4. On account of the chemical nature of the stone, its demonstration by means of the Roentgen ray is impossible.
5. The stone may have been passed.

## CYSTOSCOPY AND URETERAL CATHETERIZATION

While these two diagnostic aids cannot establish a positive diagnosis in each case of renal or ureteral calculus, they can, in a definite number of cases, yield information from which a diagnosis may be made or surmised. By their employment, it is possible in nearly all cases to locate the source of the pathological elements found in the urine, such as blood or pus. In renal stone associated with profuse hemorrhage, the origin of the blood may be determined by means of cystoscopy and ureteral catheterization; and also in descending ureteral stone associated with colic, changes may often be seen about the ureteral orifice of the corresponding side. Mention should be made here of the wax-tipped catheter. If positive information is obtained by its use, one may venture the diagnosis of stone; on the other hand, if the result of this examination is negative, the presence of stone should not be excluded.

## FUNCTIONAL TESTS

After the diagnosis of stone has been made and the treatment outlined, the condition of the opposite kidney should engage our attention, and especially whether the kidney is present or absent. This important point deserves due consideration in each case, no matter how simple the contemplated operative procedure may be. Not infrequently a simple operation is decided upon, but because of complications arising in its course the removal of the kidney is necessary. In such an instance, if the presence of the opposite kidney has previously been determined and its functional capacity estimated, it can readily be seen how decidedly comforting to the operator this must be.

Of the various functional tests which have been advised, the phenolsulphonethalein test has been most frequently used, and it has answered my purpose very well. Many objections have been advanced against complete reliance upon dye tests. One should not rely altogether upon the result of the dye test, but should include careful examination of the urine, both chemically and bacteriologically.

## TREATMENT

Before taking up the treatment of kidney stones, I shall briefly discuss the treatment of stones in the ureter.

In a general way, the treatment of ureteral calculi passed through three stages: The first stage may be represented by the period immediately after the introduction of the Roentgen rays. At that time many of the now well-recognized extraureteral shadow-producing bodies were erroneously diagnosed as calculi, and patients were unnecessarily operated upon. The second stage may be represented by the period immediately following the introduction of the shadowgraph catheter, by means of which more accurate diagnoses were made and the number of unnecessary operations decidedly reduced. The consensus of opinion at that time was that the treatment of ureteral calculi was surgical, and the operation employed was the extraperitoneal ureterotomy. The third period may be represented by our present-day views, and is characterized by the swing of the pendulum in the

opposite direction, so that at the present time the keynote is conservatism. In other words, one resorts to operation only after a prolonged, careful and conscientious use of the non-operative measures fails to accomplish removal of the stone.

These non-operative measures consist in the use of intravesical manipulations with the cystoscope. Briefly considered they are: First, dilatation of the ureteral orifice, either with a catheter or with a ureteral dilator, in order to stretch the ureteral orifice so that the stone may be allowed to pass. Where this fails and sufficient dilatation cannot be obtained, the ureteral orifice may be enlarged by slitting it with the scissors. In cases in which the stone is smaller than the ureteral orifice and situated high above the bladder in the ureter, the stone may be dislodged by the ureteral catheter. This may be followed by intraureteral injections of local anesthesia, succeeded by the injection of oil. To aid in dilating the ureter, injections into it of a solution of papaverin have been advised.

Experience has proved that by far the largest number of stones in the ureter can be handled in this way. In the remaining small number which do not respond to repeated applications of this form of treatment, advising an open operation may be justifiable.

## INDICATIONS FOR OPERATION

1. Cases in which there is a vital indication to operate. Under this head, one may consider cases of anuria, acute pyelonephritic infection, profuse hemorrhage, and conditions of retention which sooner or later lead to atrophy of the kidney.
2. Cases in which operation must be advised, but in which there is no immediate danger as regards the life of the patient or the function of the kidney. To this group belong the cases associated with chronic pyelitis, repeated attacks of colic without the passage of stone, pain or discomfort in the kidney area and the presence of stone in the ureter, which do not respond to non-operative treatment.
3. Cases in which intervention is unnecessary. In this group, cases may be considered which can be treated medically. Briefly, these are cases characterized by repeated attacks of colic associated with the passage of small stones, in which the urine is not infected and in which the Roentgen ray does not reveal large stones.

The three operative procedures in the surgical removal of kidney stone are pyelotomy, nephrotomy, and nephrectomy.

Pyelotomy, in cases in which this procedure is suitable, is simple and safe, involving little or no hemorrhage, and its great advantage over other operations is that there is no mutilation of kidney tissue, which occurs to a certain extent when nephrotomy is carried out. Pyelotomy, furthermore, prevents the occurrence of hemorrhage from the kidney into the renal pelvis, which often results in the bladder becoming distended with large blood-clots, so that the patient suffers a great deal of pain, and considerable inconvenience is experienced in freeing the bladder from these clots. The essentials for success in pyelotomy are:

1. In selection of cases to be guided by the re-

sults of the Roentgen ray and possibly by the pyelographic findings.

2. The limitations of its use to pelvic stones.

3. Its employment in cases in which there is no infection, or at best only an infection of mild degree.

4. The deliverance of the kidney.

5. The avoidance of unnecessary trauma to the pelvis.

6. The prevention of injury to the blood supply of the kidney pelvis.

Before incising the pelvis, the peripelvic fat should be carefully separated. Occasionally an accessory pelvic vessel may be present, and unless this is recognized and avoided, the patient may have a certain amount of hemorrhage. Great care should be used in performing pyelotomy so as not to tear the renal pelvis, not only because of the danger of hemorrhage, but also because large and irregular tears of the renal pelvis have been followed by persistent sinus formation. On account of the more or less limited field of operation, it is particularly desirable, before closing the incision in the pelvis, to be sure that the stone removed is intact and that no fragments have been left behind. After the stone or stones have been removed, the incision is closed with fine catgut, and then the peripelvic fat is sutured over the incision with one or two catgut sutures.

**Nephrolithotomy**—In cases in which the stone is too large to be removed through the pyelotomy incision or in which the stones extend into the calyces, branching in various directions, and in instances in which the pedicle is very short and in which there is a good deal of perirenal inflammation, and the kidney cannot therefore be delivered, nephrolithotomy should be done. There are instances in which a pyelotomy is the operation decided upon, having determined upon this procedure from the roentgenogram, but one or several of the aforementioned conditions being found, nephrolithotomy is the only course open. At times it may happen that a calculus must be removed with the kidney remaining *in situ*.

After the kidney has been delivered into the wound, it should be carefully palpated for the presence of stone; that is, the stone should be definitely located before cutting into the kidney. This may not always be possible when the calculi are very small; yet, when possible, it should always be done. Palpation of the renal pelvis may be carried out at the same time.

In cases in which the stone is seen on the roentgenogram but cannot be felt, some surgeons are in the habit of needling the kidney. This procedure is advocated by some, but condemned by many, chiefly for the reason that if a hard nodule is felt and is a calculus, it must be cut down upon anyway. If nothing is felt by needling, no one would be satisfied by the limited information obtained in this way; hence, an exploratory incision must be resorted to by all means.

If the calculus can be felt in the substance of the kidney, it should be exposed by incision, either on the convex border of the kidney, or, if the

stone is near the anterior or posterior surface of the kidney, it may be cut down upon directly.

The nephrotomy incision is usually made in the convex border a little nearer the posterior portion of the convexity than the anterior, since there is less danger of injuring the vessels. After the incision has been made, the interior may be examined with the finger, or the calculus may be directly removed with the aid of the forceps. The stone must be carefully examined to ascertain whether or not it is complete, whether or not facets are present, in order that calculi may not be overlooked.

The further treatment of the nephrotomy wound will depend upon several factors, the chief of which is infection. When infection is present, it is often advisable to insert a tube for drainage, although this procedure has been criticized because of the danger of hemorrhage which may result.

Hemorrhage is one of the more important complications following nephrotomy, and has often proved so serious that a secondary nephrectomy was necessary in order to save the life of the patient. When the hemorrhage occurs at the time of nephrotomy, it can usually be controlled by grasping the pedicle when an inspection of the field is effected. Occasionally a spurting artery is seen that can be caught with the forceps. Often when the oozing appears to be general, it may be controlled by hot pads. As a rule, the sutures which close a nephrotomy incision suffice to control the bleeding.

Continued post-operative hemorrhage renders the operator absolutely helpless. As previously mentioned, the bleeding continues, the hemoglobin goes down steadily, the patient's mucous membranes become pale; hence, a nephrectomy must be done to save the life of the patient. Under these untoward circumstances, one always feels more comfortable if the status of the remaining kidney has been definitely determined before operation.

#### COMPLICATIONS FOLLOWING NEPHROTOMY

**Urinary Sinus**—The urinary sinus usually closes in a few days or a week, but occasionally the urine continues to be discharged for three weeks. If, however, a sinus persists for a longer period, closing it by passing a ureteral catheter and allowing the catheter to remain *in situ* may be attempted. However, if ureteral catheter draining fails to give relief, some exploratory operative procedure should be done to determine the reason for the persistence of the sinus.

**Suppurating Sinus**—The continued discharge of pus from the renal sinus should at once direct our attention to the fact that a suppurating process is still going on within the kidney. In attempting to close the sinus by local treatment, possible organic factors for keeping the sinus open should not be overlooked; therefore, local treatment should not be continued too long. As a rule, the reason for the persistence of a sinus remaining open can be found, and not infrequently this is due to a calculus which has formed after the operation, or has been overlooked at the time of the operation, as well as due to a sponge.

**Nephrectomy**—Primary nephrectomy for stone is



less frequently done than either of the two previously mentioned operations. As a primary operation it is resorted to in cases of stone associated with severe infection, tumor, or tuberculosis. In these cases, results are very much better following nephrectomy than nephrotomy, provided, of course, that the other kidney is present and functioning as discussed above. Secondary nephrectomy must be resorted to in cases of persistent fistula after other operative measures have failed to effect a cure; in cases of recurrence of stone, persistent infection of the kidney after the primary removal of calculi, and for the relief of uncontrolled secondary hemorrhage following nephrotomy or pyelotomy.

Nephrectomy is the most serious of the operative measures for the relief of stone, but the ultimate result, as regards recurrences, is better than with the other two operative procedures.

Hemorrhage is one of the most serious complications of nephrectomy. It usually occurs after the kidney has been cut from its pedicle and the clamp removed, but it may be due to other causes, such as failure to include the vessels in the ligature, placing the second ligature over the first, which may render the first one ineffective, and cutting the ligature when the kidney is removed. Slight oozing can usually be controlled with hot pads, but large hemorrhages are difficult to manage, since the wound rapidly fills with blood so that one cannot see. When hemorrhage occurs, the clots should be wiped out with hot pads and the site of the bleeding found. If this can be done, the bleeding vessel should be grasped with a pair of forceps and ligated. If the bleeding point cannot be seen, grasping the pedicle and exercising firm pressure with the fingers may be successful. This procedure will often allow the clots to be removed; thereby time for examination is gained and also knowledge just where the clamp should be applied. In instances where the operator attempts to stop profuse hemorrhage, injuries to the bowel by means of the clamp are prone to occur. At times the hemorrhage occurs from an accessory vessel; and, although this may be profuse, it never reaches the same proportions as does a hemorrhage from the pedicle. Bleeding may also occur from the vena cava, as a result of direct injury during operation.

(122 South Michigan Avenue.)

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**Neuro-arthropathies: A Consideration of the Etiology and General Characteristics**—It is the belief of Herman B. Phillips and Charles Rosenheck, New York (Journal A. M. A., January 5, 1924), that neuro-arthropathies caused by peripheral nerve disease or injury or other factors not definitely understood may occur with more frequency than is usually believed. These neuro-arthropathies are possibly misinterpreted, on account of the absence of demonstrable disease of the central nervous system. In the wake of such misinterpretation, extensive joint operations may be performed unnecessarily, as in one case cited. The possibility of neuro-arthropathy should always be considered in obscure or ill-defined joint manifestations, even in the absence of cord disease. The etiology may be found in disturbances of the peripheral neural apparatus or other hitherto unknown factors.

## JUSTIFICATION FOR STERILIZATION BY EITHER SURGICAL OR RADIOLOGICAL METHODS

By REX DUNCAN, M. D., Los Angeles, California

The literature is abundant with most excellent articles dealing with the causes and treatment of sterility, but much less of scientific merit has been published pertaining to the justification for sterilization. Indication for sterilization broadly may be included under two heads. First, medical or those in which, because of some pathological condition in the woman, it is necessary to prevent pregnancy that her life may not be endangered. In advanced pulmonary tuberculosis, nephritis, diabetes, advanced cardiac lesions or other constitutional disturbances which would render pregnancy dangerous to the life of the woman, sterilization is indicated. In uterine cancer, fibroids, certain inflammatory conditions of the pelvic organ and other conditions in which sterilization would necessarily follow, appropriate treatment is undoubtedly justified. In women with deformed pelvis or other conditions where delivery would require cesarian section or other dangerous operative procedure, it is a question to be determined by the patient, family, and physician. Statistical studies show quite clearly that pregnancy favors the recurrence of malignant diseases in breast cancer and malignant diseases of the genital organs, and while these conditions quite commonly occur after the child-bearing period, sterilization is undoubtedly indicated. Without entering into a detailed discussion of the numerous pathological conditions in which it might be indicated, it would seem that the woman's life should receive first consideration and it is, therefore, justifiable to produce sterilization in any of those conditions in which it might be demonstrated after proper consultation that pregnancy would endanger the life of the woman.

Secondly, the justification of sterilization for social or economic reasons or from a purely eugenic standpoint are subjects in which there is a great variance of opinion and permissible of considerable discussion. The attitude regarding sterilization for social reasons is rapidly changing. Undoubtedly, it is worthy of more thought. However, further discussion will be omitted here.

It is, of course, a well-established fact that sterilization may be produced either by surgical or radiological methods. The method to be chosen necessarily depends somewhat upon the pathological conditions rendering such a measure justifiable or permissible, the numerous indications for which need not be outlined here. Sterility may be produced by a single intra-uterine application of 2500 or more millicurie hours of radium which may be given in from four to 24 hours, depending upon the quantity of radium used or by the use of X-ray treatment over the pelvis, using such technique that the ovaries will receive approximately an erythema skin dose. This may be accomplished with high voltage X-ray equipment in one or two applications totaling approximately one hour.

While radium is commonly employed in the treatment of certain pathological conditions of the pelvis without producing sterility, sterilization pro-

duced by means of either X-ray or radium produces an amenorrhea and is associated with the usual menopausal changes. The nervous manifestations, however, are, as a rule, less prolonged and less severe than the normal or following radical surgical procedure.

Radium or X-ray is contra-indicated in the presence of acute or subacute pelvis infection. On the other hand, radiological methods are particularly appropriate in cases of severe tuberculosis or other local or constitutional diseases that would render the individual a poor surgical risk.

Because of the safety and simplicity of sterilization by radiological methods, this procedure is to be preferred to surgical means in all cases excepting those in which abdominal surgery may be indicated for the correction of some existing pathological condition, acute pelvis infection or in young women where menopausal changes are not desired.

**Lay Advertising and Child Welfare**—Under this heading, Frank V. Bogert (N. Y. State Journal of Medicine) says: "Never has the danger of a little knowledge been more prettily demonstrated than in the matter of public education in regard to diet. Producers of proprietary foodstuffs, in exploiting their wares, have reached a point so close to the limits of honesty that their pernicious teachings must be reckoned with in the promotion of public health. More especially does this concern the worker among children, who, dealing with the more delicate digestive apparatus of the young, an apparatus which must be protected and developed for the future, also deals with a group more vulnerable to temptation and managed dietetically by overzealous guardians. To the average mother, today, the one important consideration is to obtain the ingestion of sufficient calories, vitamins, iron, and salts by tempting, urging, coaxing, and force without regard to needs and ability to assimilate. The intemperate prohibitionist likes to believe that one can't eat too much. Weight is too often made the standard of health and the undernourishment of overfeeding is treated by more food. . . .

Every pernicious dietetic habit that we have been endeavoring for years, and with some success, to eliminate is openly encouraged. Overfeeding, underfeeding, between-meals feeding, unintelligent stimulation of the appetite, candy and sweet-eating in excess, all, are advocated by the selfish world of business in order to increase consumption. . . .

When we know that the sensible method of establishing a normal appetite is to keep food away until it is desired, our patients are advised to eat cat-sup to make the foods they 'like best taste better' and a brand of soups is advertised as 'your appetite's temptation.' Tonics, condiments and stimulating sauces are too commonly given to children because they are relished and because they increase food intake, and, in these days of undernourishment, justification is gladly found and the practice continued to the child's undoing."

**The Business Side of the Doctor's Service**—"From January 1, 1924," says a St. Louis doctor in a circular letter to his patients, "my practice will be on a business basis.

"I am compelled to pay office rent, drug bills, phone, light, gas, tires, etc., monthly and promptly. In consequence, I do not deem it just that I should render my services and supply drugs gratis or on an indefinite payment. Patients unable to pay, mentioning the fact, will be treated as promptly as before; those able to pay, and who do not, will oblige me by not calling me."

## THE EVOLUTION OF ROENTGEN THERAPY IN HIGHER VOLTAGES \*

By ALBERT SOILAND, M. D., Los Angeles

Two years have now elapsed since the present short-wave form of X-rays came into radiological favor in America, and it is now perhaps timely to venture some comments upon this theme:

For a great many years our most successful field of radiotherapy has been in lesions of the skin and subcutaneous tissues. For this work every conceivable type of electrical generator imaginable has been employed. Anything which would make a vacuum tube turn pink, blue, or green has been used with which to treat all ills that are the heritage of mankind. Little by little the pink and the blue tubes were placed in the discard, and gradually the intrepid radiologist essayed to delve deeply into the human anatomy, and finally succeeded in demonstrating beyond the possibility of a doubt that physiological and pathological response could be elicited upon structures below the body's exterior. Finally came some order out of chaos, and attempted measurements of all electrical factors entering into X-ray production brought forth a tabulation of units, destined to place Roentgen ray treatment upon a relatively scientific basis. From an uncertain and flickering voltage, giving rise to a phantom X-ray stream, there has come today a powerful generator with almost unbelievable capacity delivering through specially designed hot cathode tubes a force unseen and almost unknown, the remote effects of which we are all struggling to direct and understand. This progress, from our first feeble attempts to radiate the human skin surface to our present ability, to saturate the innermost recesses of the human body, has all been accomplished in the comparatively brief space of twenty-five years. You all know the many interesting periods of transition, of doubt, of struggles, of superstition—yes, even of death among some of our martyred pioneers—yet the science has emerged triumphant, and that which once eluded us is fast becoming our willing slave.

The present discussion will deal with the problems of deep therapy and the evolution of the higher voltages. We will, therefore, omit reference to skin and superficial radiation, and state briefly that it is now quite possible, by varying the factors of our operation, to inundate a desired depth field, with the knowledge that in this field a fairly constant effect of the energy of radiation may be obtained.

For the purpose of illustration, we may roughly state that, with a voltage of 200,000 at a 50 centimeter skin distance and with 10 millimeters of aluminum filter, effective radiation may be apparent four inches below the skin surface. With the same voltage and 15 millimeters of aluminum filter, an efficient but smaller amount of energy of radiation may be delivered six inches below the skin surface. With 20 millimeters of aluminum filter, a still smaller quantity of effective rays reach an eight-inch distance below the skin. This table is, of course, only relative, but it will serve to illustrate

\* Presented to the Section on Radiology at the Fifty-second Annual Session of the California Medical Association, San Francisco, June, 1923.

the point. Rays which are not absorbed have no demonstrable action. It is only at the point of absorption that the ray gives off its energy; in other words, its corpuscular energy is dissipated with a subsequent cellular reaction, the termination of which usually results in a restored normal function.

It has been frequently stated that it did not appear logical to treat something six or eight inches below the surface of the body when the rays had to traverse so much normal tissue in order to reach the lesion, and that the intervening tissue must suffer by virtue of bearing the brunt of the attack.

While we are by no means agreed on the *modus operandi* of the X-ray stream, it has been demonstrated time and time again, both clinically and microscopically, that specialized cells, those of irregular formation such as the tumor type, are particularly susceptible to short-wave forms of radiation and that no appreciable lasting effect occurs in normal cells in dosage sufficiently heavy to transform completely those of pathological habit. Careful laboratory experiments and investigations have shown that only those rays which are absorbed by the tissues are capable of producing biological effects, and this knowledge has enabled the laying down of formulae which permit us to approach a therapeutic rationale.

It is to be regretted that many surgeons still look upon radiation as a rival, or something to be avoided. Surgery and radiation must work hand in hand, and one support the other in nearly all lesions which may be attacked with the prospect of cure. Surgery has reached a plane of perfection which is undeniable and which has, up to the present time, been the most acceptable method of treatment in many cases where other methods, including radiation, are failures. Yet one must admit that surgery is essentially limited to conditions where the necessity for mechanical interference or manipulation is permissible. On the other hand, radiation is a reactive process which cannot be considered mechanical in any sense of the word. It possesses properties which are reactionary, destructive, and reconstructive, acting on each individual cell in direct ratio to the inherent biochemic response and reactions of living protoplasm, and the effect of an erythema dose extends over a long period of time.

As a means of developing high voltage, the alternating current transformer, with either arms or disk, is still the instrument of general use. While this type of rectification is not ideal, it seems to have stood the test of time fairly well, the greatest drawback being the peak surge phenomenon, which is so disastrous to the life of the tubes. There is, under close investigation, the possibility of making available for Roentgen ray work a direct current generator, which, if successful, will simplify some of our present problems. Deep therapy will, in all probability, develop rather slowly and this is a point in its favor.

The problems connected with the purchase, installation, and use of a deep power plant are great enough to prohibit promiscuous broadcasting of such units. No one who is not thoroughly interested in the work will care to incur the expense and

responsibility of an adequate installation. While the monetary consideration of a deep therapy plant is of some concern, this sinks into insignificance when we contemplate the dangers associated with a live line of high voltage electrical stress, sufficient to destroy human life by a careless approach to the circuit. We have become so accustomed to play around our eight or ten-inch apparatus with impunity, ordinarily with no more serious results than a bad temporary shock or a small skin blister, that, unless our attention is sharply called to the new dangers, the consequences may be disastrous.

Up to the present, there is probably no pathological condition in existence that some enthusiastic radiologist has not attempted to treat, and while many of these attempts have been futile and the reason for their institution may have bordered on the ridiculous, yet the pertinent fact remains that radiology is daily enlarging its scope of usefulness. There is perhaps nothing in the entire therapeutic armamentarium which can approach, even in a small degree, the range of physiological action and reaction of the energy of radiation, and when we stop to contemplate the enormous scale of wave lengths at our command, of which we have as yet only fragmentary knowledge, our sober duty to this wonderful science becomes apparent. What the end-result of the investigation in our present-day high voltage work will be is not easily foretold. Refinement of technique, accuracy of dosage, greater care in our clinical and laboratory diagnoses, with a standardization of our individual efforts, will surely engender confidence and respect for this strictly medical specialty.

Can we, at this time, come to a conclusion as to the limit of useful voltage for generating short-wave X-rays? The writer believes that, with our present conception of the liberation of the energy of radiation, 300,000 volts would be sufficient for all purposes; in other words, all things being equal and with tubes constituted to functionate under a voltage of 300,000, the energy would be so enormous, both in quantity and quality, that to harness the useful stream in such an output would be difficult and perhaps dangerous. This statement is based purely upon the observation of the action of the daily serviceable voltage not in excess of 220,000. The writer ventures the opinion that a stream of short-wave electrons of more than 250,000 volts would, in many instances, overshoot the mark. If this is true, higher voltages are perhaps unnecessary. On the other hand, if, with a maintained tension of say 250 kilovolts, we were able to use amperage of high degree, so that the quantity of the stream could be substantially increased, it might be possible, substantially, to increase the beneficial effects of short-wave therapy. This procedure would also permit the simultaneous operation of a number of tubes limited only to the available capacity of the space in the laboratory and the demand for this type of work. The writer feels that it would be distinctly inadvisable, however, to attempt a shorter wave force of radiation until it has been thoroughly



demonstrated what the use and limitations of the present available output may be.

1407 South Hope Street.

#### DISCUSSION

**Alanson Weeks, M. D.** (350 Post, Street, San Francisco)—I remember ten years ago or more Howard Ruggles making the statement that, if ever a nineteen-inch spark gap could be procured, deep X-ray therapy would become a fact.

It has been my privilege since Rehfish installed the first deep power plant in this city at St. Luke's Hospital to watch the effects of such deep radiation treatment. The results are improving sufficiently to further the hope of future real usefulness. The actual destruction of the mucous membrane of the bowel when deep radiation is used for abdominal disease and the bad results of too much foreign protein being turned loose by overdosage have gradually lessened.

I trust I am speaking for all surgeons when I tell Soiland that there can be no question that surgery and radiation must work hand in hand, and that we surgeons will be grateful for the day when radiation or any other therapeutic measure shall take our place.

It is a charming thing to see a man so thoroughly wrapped up in his specialty, so modest in his claims for the same. He gives us much hope, but no false hopes.

**Howard E. Ruggles, M. D.** (135 Stockton Street, San Francisco)—Soiland has conservatively and completely stated the case for deep therapy as we know it at present. Further advances in this work will come with improved apparatus for which we are dependent upon the research laboratories of our universities and electric companies and with increasing experience in the application of our available equipment to a large amount of clinical material which must be carefully studied over a period of years.

The results so far are encouraging and occasionally brilliant.

**Dr. Soiland** (closing)—The discussion by Weeks and Ruggles is greatly appreciated, and it is a pleasure to know that they coincide with the thoughts expressed in the article.

My main object in presenting this theme before the section has been to make haste slowly in the deep voltage therapy; not to condemn because of damage alleged to have resulted from its use, neither to make extravagant claims for results, which time has not yet permitted us to definitely determine. There can be no question that short-wave X-rays are a distinct advancement in the field of radiation therapy.

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**A Valuable Manipulation for the Relief of Constipation**—The procedure advocated by Herbert B. Whitney, Denver (Journal A. M. A., January 5, 1924), is applicable only to the evacuation of a fecal mass in the lower rectum, close to the anal sphincter, but hard to move because of its size, or density, or both. It consists in a remodeling of the mass by external digital pressure. Sitting in the usual posture at stool, the patient, with the second and third fingers of the left hand, carried down from behind, presses with the necessary degree of force on the thin and distended tissues between the coccyx and anus, and through this on the fecal mass directly beneath. The pressure exerted is not for the purpose of expelling the mass, but solely of changing its shape. As soon as this is accomplished, the usual abdominal pressure is quickly effective. The digital pressure must always be considerable, sometimes excessive; but even the latter is said to be both painless and harmless, and the ease and rapidity with which the favorable change of contour is effected, and evacuation follows, is often little short of marvelous.

#### THE ROLE OF ALKALIES IN TREATMENT \*

By ANSTRUTHER DAVIDSON, M. D., Los Angeles

Nature's one object in life is to keep the blood stream pure, and the salts therein are kept in fixed proportions to that end. In the healthy individual the blood and tissues are alkaline, the chief salts Na, K, Cal, P. are all present in fixed quantities, and nature, in disease, draws from the food or tissues whatever is available to keep the tissues alkaline. When the tissues become acid throughout, death, as you know, ensues.

All the secretions, with one exception, are alkaline; all our excretions are acid. The one notable exception is the secretion of HCL by the stomach. It is usually presumed that HCL is secreted for the sole purpose of aiding the digestion of meat products, but that is only part of its functions. This acid is the medium whereby the Na, Cal, and other salts are rendered soluble and capable of absorption by the blood stream. Hyperchlorhydria, so familiar a feature in digestive troubles, is not the result of irritation; it is a compensatory process whereby nature seeks not only to eliminate the excess of acid in the blood, but attempts to dissolve more salts to neutralize that acidity and break the vicious circle already established.

In the formative period of youth hyperacidity is a serious factor. When the food is well balanced, of course, this does not occur. The chief causes of hyperacidity are the excessive use of carbohydrates and sugars. When acidity of tissues destroys the alkaline balance of the blood, sickness is prone to supervene. The administration of alkalies in fevers and catarrhal inflammations was established empirically ages ago. The standard remedies of our predecessors were citrate of potash and liquor ammonia acetatis or some such alkali, and I know of no better now, though I think the tendency of many practitioners is to prescribe sedatives and antipyretics.

There is no more certain method of aborting an acute coryza than by administering bicarbonate of soda in large doses on the first indication of an attack. In the late influenza epidemic, I have every reason to believe, from my observation and experience, that those individuals who daily took enough soda to render the urine alkaline nearly invariably escaped the disease. At one time two of my students who invariably suffered from poison oak tried the experiment of keeping their urine alkaline when on mountain trips, and for the first time were able to return unaffected. Acidity of the tissues seems to make them more vulnerable, the alkalies restore the blood to normal and thereby increases their vital resistance. During the war many soldiers suffered from severe form of seborrheic eczema that proved quite resistant to ordinary remedies. One medical officer succeeded in curing these cases by the administration of alkalies. Sodium bicarbonate was most commonly used, but in some cases one pound a day of this was given without altering the reaction of the urine. In such instances, one can usually alkalize the urine with the fixed carbonates. Soda has

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\* Read before the Los Angeles County Medical Association November 1, 1923.

another value besides alkalization; it is a solvent of colloids and it thus probably aids in any bacterial invasion by rendering the precipitins more soluble. In the administration of large doses of alkali, some discussion has arisen as to the possibility of such doses causing a condition of alkalosis that might prove serious. That such a condition has been established by intravenous injections in animals is evident, but that such a condition can arise in ordinary administration is doubtful. Even in experimental work it is just possible that the sodium and not the alkali is at fault as sodium in large doses is poisonous.

Copper and manganese are among the rarer of the blood salts, and may be of the nature of catalysts. When ringworm attacks the skin it spreads in increasing circles, and on the parts invaded it seldom returns. It is evident in this case that the fungus exhausts the tissues of some chemical necessary for its growth. That chemical is probably manganese, as we find it has a marked action on the growth of the closely related aspergillus.

Of the other salts of the blood, the most important in quantity at least are the Mg. P. and Cal. compounds. All are important constituents of the bony framework, but have probably many other values. The Mg. and P. have not been as carefully studied as the Cal., so reference to them will be omitted.

Calcium, on account of its influence on coagulation and reparation of tissue, has always been a subject of interest to the profession. Calcium is never found in destructive lesions such as carcinoma. The calcium in the blood of the normal individual exists in both the ionic and combined states. The salt is chiefly derived from milk and vegetables, especially in faw form. Boiling reduces the amount in vegetables to nearly half; whether it does so with milk I have not been able to ascertain; if it does this may, in a measure, explain some of the diverse results obtained in experimental work on rickets. The excess calcium is excreted by the bowels; very little passes with the urine.

In tuberculosis calcium is the chief salt concerned in the healing and circumscribing process. It was long ago noted that workers around lime-kilns were practically immune to tuberculosis. Nearly everyone is presumed to have acquired tuberculosis at the age of puberty. At that time, when the demands of puberty are straining nature to the limit to supply the necessary ingredients for the perfect development of the skeletal structures, if the individual, by excess of carbohydrates in his diet, develops acidity of his tissues, nature, in the effort to counteract this, does one of two things: it either stunts the individual growth or, failing to do so, draws from the tissues calcium enough to keep the blood stream normal. Let me illustrate this by the behavior of grain. When we have a dry season nature matures the grain rapidly; she reduces the length and strength of the stalk and limits the number of the grains, but not their quality, as the interference with the reproductive quality would ultimately destroy the species. Nature, as you know, cares nothing for the individual, but jealously preserves the type. It is the same with man. When transplanted to the slums

his children under the adverse conditions will be smaller of frame and mature earlier. If on the other hand development continues or sickness or some other factor interferes, the blood, in its efforts to maintain the alkaline balance, will draw from the tissues, bones, and teeth the necessary salts available. When this is done the calcium necessary to defend the body from tuberculosis is withdrawn and active tuberculosis may result. If in the growing period the individual is liberally supplied with meat, hyperacidity is less likely to develop. The carbohydrates have not the combining power for acids that proteins have. When fixed alkalies are not available to correct the acidity, ammonia is drawn from the amino-acids to supply the want; the mucous membrane of the stomach and bowels contain large amounts of ammonia. In a rather long experience in medical practice I have never seen a case of tuberculosis in a butcher's boy.

In a leading article in the *Journal of the A. M. A.* last year, the writer says: "Bread and meat, the most popular ingredients of the American dietary, are decidedly poor in calcium. Indeed it would be virtually impossible to consume enough of those articles of food to supply the estimated quota of lime without making intolerable demands on the metabolic capacity of the body." I wonder if the writer ever considered where the Esquimaux gets his calcium. Some of them, at least, never see a vegetable; cereals are unknown; they live entirely on meat, which is very poor in calcium. The mature individuals among them may acquire some calcium from the small bones and the fresh blood, but that would scarcely apply to the toddling child, and yet rickets and imperfect teeth are practically unknown. As the Esquimaux apparently acquires all the necessary calcium from a purely meat diet, it is obvious that he must utilize all the calcium available and, having acquired it, he does not develop hyperacidity and lose it again by reabsorption to maintain the alkaline balance in the blood. He eats his food raw, or nearly so; eats everything, acquires considerable calcium from the blood and ammonia from the entrails. He consumes enormous amounts of fats, which have a marked influence on the absorption of calcium, yet the amount he acquires seems so far below what we consider adequate that it is fair to assume that he is not subject to the hyperacidity our diet so often entails or he would show more evidence of it in his bony structures. It may be, on the other hand, that our theories as regards the amount of calcium are all wrong or that, in special circumstances, other salts contribute to its functions.

The teeth of all savages, who, fortunately, are unable to acquire cooking ranges, are usually perfect. With us only the generously meat-fed youth have perfect dentition. A vast amount of ink has been spilled over the causes of tooth decay. Specific bacteria have been identified with the destruction of the enamel as the primary cause. When those pathologists explain to me how it is that the African and Brazilian savage can file or chip his teeth to triangular points, sacrificing all the enamel on the sides and yet retain these teeth to old age (they themselves assert it preserves them), then we may consider the bacterial problem. The condition of the

teeth is wholly dependent on the alkali balance of the blood stream. Among civilized nations the pregnant woman is not always able to supply the necessary calcium for the foetus from the ordinary food supplied, so the saying "every child costs a tooth" has become proverbial. The fault in this instance may be in the endocrine insufficiency. Hyperthyroidism is always associated with increased calcium excretion, and it is possible that in cases of pregnancy, associated as they frequently are, with enlarged thyroid that the function of the parathyroids which conserves the calcium is suppressed.

The increase of respiration in febrile diseases is nature's attempt to diminish the acidity in the cells by increasing the carbonic acid output, encouraging the proteolysis in the cells and setting free ammonia. The capacity of calcium to increase the coagulability of the blood has led to its use in urticaria and other diseases of the skin associated with edema. Bile salts are necessary for the absorption of calcium, and the absence of these is the cause of the tendency to hemorrhage in jaundice. Fats have some special value in the absorption of calcium apart from their relation to the fat soluble vitamins, and I believe our predecessors, in combining the hypophosphates of Cal. and Na. with cod liver oil in the treatment of tuberculosis, were utilizing a remedy that is too much neglected now.

Calcium is usually abundant in our dietary, but in some circumstances the cells are unable to utilize it. It remained for Grove and Vines to find the reason thereof. The calcium of the blood is present in a combined or ionized form, the latter normally 10.5 per cent. They found that in many ulcerative conditions of the limbs the calcium was in excess in the combined form. The administration of calcium by hypo slightly improved conditions, the oral use of it not at all, but by the use of parathyroid the calcium balance was restored to normal, and healing rapidly ensued. Their reasons for this may be thus summarized. The parathyroids have, with their other functions, a specific action on calcium metabolism, and calcium is necessary to sustain the resistance of the cells against bacterial and other toxic agencies. As in all chronic diseases, there are toxic substances being absorbed that ultimately break down the cell resistance, and of the defensive, salts calcium is the most important. In varicose ulcers, in examination of the blood, there was invariably found a deficiency of ionic calcium. In these cases when parathyroid was administered and the normal balance was established, the ulcers rapidly healed. In one leg ulcer under my own care, I had for two years vainly attempted to heal it by the current remedies, but it healed in four weeks under parathyroid, with vaseline alone as a local application. Those authors have extended this method of treatment to all ulcers—stomach, duodenal, etc., to suppurative and non-suppurative, and to all diseases in which a deficiency of ionic calcium was found. Among the cases detailed by them were twelve of stomach and duodenal ulcers in all of which clinical cures resulted. It would seem that they have at least established a method of procedure that promises fruitful results.

I do not wish to imply by these remarks that

the salts I have spoken of are all the important ones, nor do we know if they are the most important in the conservation of the vital forces. I have said nothing about acetonuria in diabetes or acute acidosis in children, as that is outside the range of this paper. It must not be assumed from these remarks that all diseases are the result of acidity of the tissues, but that the presence of acidity lowers the defensive qualities of the body and renders it more liable to bacterial and other invasions.

Many of our remedies fail to relieve because the condition of the blood stream is abnormal, and the aim of this paper is to induce you, when your remedies fail, to examine the blood for any deficiency in the salts and restore the chemical balance in the cells on the physico-chemical action of which all health depends.

419 South Alvarado Street.

**Diet in Pellagra**—In summarizing this subject, Joseph Goldberger and W. F. Tanner (Public Health Reports) say:

1. Eight well-marked though not very severe (mainly dermal) cases of pellagra were treated with fresh beef, as the only known therapeutic element in the diet.

2. In all eight cases clinical improvement followed the inauguration of the beef treatment.

3. In four of these cases the treatment with beef followed an unsuccessful period of treatment with gelatin, the contrast in results tending to emphasize, on the one hand, the inadequacy of gelatin, and, on the other, the therapeutic potency of fresh beef.

4. The preventive value of milk was tested by daily supplementing the basic diet of a group of twenty-nine inmates of the Georgia State Sanitarium with approximately 40 fluid ounces (1200 grams) of buttermilk.

5. None of these patients developed any evidence of pellagra at any time during the period of observation, which for twenty-five of the group, lasted one year, although it is believed that without the buttermilk or equivalent supplement upward of 40 or 50 per cent of the group would have developed pellagra within a period of three to eight months.

6. Fresh meat and milk contain the essential pellagra-preventive factor or factors.

7. It is estimated that about 4 to 4½ ounces (125 grams) of fresh beef (lean round steak) and not over about 40 fluid ounces (1200 grams) of buttermilk will suffice to prevent pellagra in all but very exceptional instances.

8. Fresh butter (from cows largely pasture-fed) ingested daily in quantities averaging approximately 125 to 135 grams (butter fat 100 to 110 grams) failed to prevent pellagra in several instances in which it was tried.

9. Cod-liver oil ingested daily in quantities averaging upward of 2 grams per kilo of body weight failed to prevent pellagra in several instances in which it was tried.

10. The primary etiological dietary factor in pellagra is a faulty protein (amino acid) mixture, a deficiency in some as yet unrecognized dietary complex (possibly a vitamine), or some combination of these.

**Protection of the Public From Incompetent Doctors**—One of the most encouraging signs of the present time is that the public conscience is becoming aroused to the fact that, no matter under what label the doctor may be listed, the essential prerequisite is that he is competent and has the proper scientific training in the knowledge of disease and the care of the sick. In fact, that is the only way in which the public is particularly concerned in the matter.—Federation Bulletin.



## MENTAL DISORDERS CONSIDERED AS MALADJUSTMENT OR BROKEN ADAPTATION TO THE ENVIRONMENT\*

By GLENN E. MYERS, M. D., Los Angeles

In 1913, Hoch and Amsden published a "Guide to the Descriptive Study of the Personality," which has been very useful and instructive but too lengthy and diffuse to employ as a routine procedure. At the Quebec meeting of the American Psychiatric Association, Amsden offered a revision of this first plan of attack, with the idea of focusing the information into more narrow channels. In the paper Amsden defined personality as *the aggregate of those tendencies predisposing to reactions which the individual has come habitually to display in the adjustments his life has required of him*. Amsden has said further: "These preferred reactions, or personal traits, may be those whose nucleus is of an instinctive nature; they may relate to behavior in which complex emotions are especially in the foreground; they may relate to the ease or difficulty of conscious response to new situations. A statement or summary of a personality would, therefore, attempt to indicate the reactional assets and liabilities of the individual in such wise that an insight is gained into the probable general course of action he would, under given circumstances, follow."

I quote Amsden to call attention to his instructive paper, and because my following remarks are allied to the general trend that he has expressed. I shall not try to present anything startlingly new and my remarks are, perhaps, directed more to other medical men than to the psychiatrist. Yet I have the feeling that, although so much has been written about mental mechanisms, there is still a too considerable tendency to be satisfied with the making of a diagnosis, and a still too considerable attempt to force objective symptoms into the form which one usually conceives under the name of one or another diagnosis, oftentimes like putting a square peg into a round hole, without much attempt to really understand the mechanism of the disorder. The fundamental principles of mental mechanisms, as we conceive them with our present knowledge, are simple and readily understood. I believe, then, that a repeated presentation of a review of these mechanisms is indicated.

In order to understand a mental upset, one must understand the patient's previous mental make-up, the difficulties that have confronted him and the manner in which he has failed to adapt himself to them. First, let us consider the development of the mental make-up or personality, taking up in order the influence of heredity and then of environment.

We come into the world as a product of our ancestry. We resemble our parents in physical appearance, show physical characteristics of our stock further back, and show certain unmistakable physical characteristics of our race. That fact is well known and need not be elaborated. It is also fairly conclusively demonstrated that we inherit mental attributes from parents, forebears and race, very

much as we inherit physical traits. We tend to show most markedly those mental traits which have been handed down through generations and have been characteristic of our stock. That we actually *inherit* these traits and do not acquire them solely from our environment, is shown in the instances in which a child or adult manifests certain unmistakable mental characteristics of a parent or grandparent, after having been completely dissociated from his family since birth. The persistence of racial traits is well shown in the Jew, who has been relatively uninfluenced by various changing environments through centuries. It is generally granted that we inherit certain instincts, such as those having to do with self-preservation, gregariousness, sex, fear, play, imitation, curiosity, motion, flight, repulsion, pugnacity, acquisition, constructiveness, etc. As primitive peoples are governed more by instinct than are civilized peoples, a notable instance of the exhibition of primitive traits is that of the negro, who was transported to a civilization perhaps a thousand years more advanced than his own, and to which, in a comparatively short time, he has made a superficial adaptation, but who, in his psychoses, shows primitive, animal-like behavior which one never sees in the mental disorders of the white man.

Our stock is, then, of great importance and some of us have cause to regret that we cannot choose our parents. For upon the mental and physical attributes of our parents and forebears depends our coming into the world with healthy or diseased body and mind. I cannot conceive, however, the inheritance of an actual psychosis, although it cannot be gainsaid that inherited organic defects or bad mental traits predispose to the development of insanity. This distinction is not always drawn. Fortunately, just as proper hygiene and medical treatment may do much for the benefit of an inherited physical defect, so an inherited tendency to insanity need not result disastrously, providing it is not too marked and providing the proper environmental influences are brought to bear. The unfortunate exception to this is the fact that the capacity for intelligence with which we come into the world is fixed in its limits and cannot be enlarged upon through environment. The child who is born mentally defective, no matter what his opportunities, can never reach the intellectual expansion of the normal adult. He can acquire only the knowledge possible to a child. The extent of the knowledge that he acquires is influenced by his environment, it is true, but his ability to assimilate that knowledge has definite limitations from birth. The limits of such capacity for intelligence depend directly upon the limits of such capacity in the parents, influenced, of course, by alcohol or syphilis or other disease or trauma of parent or child. The importance of the traits that we inherit as regards our future personality is the fact that they are in large extent primitive and instinctive, and tend to be unorganized and turbulent, and many of them must be repressed for the good of the individual, and after having been repressed they tend to reassert themselves to the disorganization of the personality. If the environment is good, they are moulded to

\* Presented to the Section on Neuropsychiatry at the Fifty-second Annual Session of the California Medical Association, San Francisco, June, 1923.

subservience of good trends; if bad they are liable to be added to or enlarged upon, interfering with the full development of the personality.

It seems to me that an entirely too pessimistic attitude is entertained by some psychiatrists and rather generally by other medical men, in regard to the influence of heredity upon the production of abnormal mental conditions, and that too little consideration is given the influence of environment upon the individual. Because a patient manifests abnormal mental traits, which were also present in a parent or other relative, it is not conclusively indicated without further study, that they were inherited. The patient may show such traits, not present in a member of his family, but exhibited by someone not a blood relation. They who so conclude fail to realize that certain traits of the personality which they had attributed to heredity were really not acquired before birth, but were assimilated from the environment during infancy and childhood. Certainly, a mental instability may be inherited from mentally unstable parents, and a tendency to insanity from insane parents. Yet such an inherited tendency need not lead to insanity any more than the child of tubercular parents need develop tuberculosis, providing the tendency is not too marked and the child grows up in the proper environment.

As the mental make-up, or personality, is the sum of expression of our mind, let us next consider what the mind is and how it develops. In order to form a memory something must be observed, attention must be given it and it must be associated with other memories. The enormous accumulation of associated memories constitutes the mind. If these memories can be recalled, they are a part of the conscious mind; if they cannot be recalled, they are a part of the unconscious mind. The majority of our experiences are forgotten; in other words, memories of them become unconscious, and so our unconscious mind determines largely our attitude toward our environment. I have already stated that the child inherits certain mental characteristics. He may also have received certain mental impressions of his life within the uterus. Certainly, he begins to get impressions of his environment from the time of birth. While his reactions are at first preponderatingly reflex in character, in other words, they are not consciously directed, the impressions from his environment accumulate fast, and he soon begins to manifest a type of personality that becomes more and more characteristic of him as an individual. The sensations of light, warmth, hunger, the satisfaction of hunger, are experiences, and the child soon learns to react to them with crying, or smiling, or sleeping. Displeasure and anger may be early shown. As impressions and memories of impressions accumulate, the reactions become correspondingly more complex. Indeed the new impressions of a child are many times more numerous during the period when all the world is new than is true in any period of time of corresponding length in the adult, whose new experiences are relatively limited. Consider how observant a child is, how soon after birth it is attracted to objects or occurrences, how impressionable it is. That is the proper time for

laying a stable foundation for a good mental make-up. This is especially important if there has been mental instability in the parents. The child of tubercular parents should be removed to an environment where he will not be exposed to infection, but where that disease may be avoided through healthful out-of-doors living. It is equally important that the child of mentally unstable parents shall not be permitted to assimilate the bad mental traits of his parents or of others in his environment through association. He should, on the contrary, be intimately associated with persons whose mental traits are normal and, accordingly, exemplary.

Much has been written about the proper environment for a child. Briefly, in addition to remarks already made, I believe that the child should be let alone for the most part during that period when its activities are mostly reflex in character. It should not be mauled about, and taken up and put down again, but should be permitted to learn the rudiments of regularity and routine through regular feeding, regular hours of sleep, and gradually regular attention to its other habits. Later, care should be taken in its sexual education. It will learn from others, if not instructed about sex by its parents, and it is important that this instruction shall come from the parents, who should take care never to practice deception, but should tell enough to satisfy and to insure a return to the same source for further information. Possibly, next to the inheritance of a normal capacity for intelligence, the development of a normal attitude toward sex is of greatest importance for the mental welfare of the individual. There is especial danger in the development of a too strong attachment to a parent. Through such an attachment many a man does not marry because he cannot find a woman sufficiently like his mother, and many a woman cannot break away from her father to go and live with another man as his wife. Much matrimonial inharmony, overindulgence in alcohol, paranoid trends, etc., may be traced to a poorly balanced attitude toward sex. The child should not associate exclusively with adults or with children who are much younger than he, but should have opportunity to play, especially with children of his own age, but also with older and younger children. In that way he can best learn to give and take, to lead and to follow, to have the proper admixture of success and failure which will render him best fitted to meet the world. Repeated failure engenders a feeling of inferiority to situations, and handicaps the individual for getting on in the world. Unbridled success engenders an hypertrophied ego. The only child or the sickly child is often subject to too much sympathy and attention, with the result that he grows up without initiative and forcefulness and is a failure, even though he recovers his physical health. If the parent is too severe, the child is liable to become sullen and resentful and to hate the parent, and later to hate the parent substitute in the person of the school master or employer. The development of the personality should be closely followed in order to learn what trend the child's best abilities take and to educate him along that line. The scope of this paper does not permit further details.

It is thus seen that the first few years of life are of the utmost importance in the development of a type of mental make-up through which the individual will later be able to adapt himself well to the world. Mental disorders may be potentially instituted in childhood through faulty modeling of the mental make-up by bad environment, and the bad environment may consist in the association with someone who is mentally unstable or insane, or through an improper attitude toward the child by quite normal persons. And, vice versa, defects in the mental make-up, originating in childhood, are to be looked for in the investigation of mental disorders rather than to expect to find that they have been transmitted directly from parent to child. The individual grows up with a mental make-up which fits him or unfits him for overcoming difficulties or adjusting himself to difficulties that arise during the course of his life. Few, if any of us, may be said to be perfectly well balanced and perfectly normal mentally. The majority of us have difficulty to adjust ourselves to various situations that arise, and in reaction to such situations we show anger, or irritability, or depression, or worry, or any one of various trends of thought or conduct which may be present in others as important symptoms of psychoneuroses or psychoses. Some of us are able to meet ordinary conditions of life, but, owing to an inherent instability of make-up, break down when confronted with especially trying conditions. Others are so unstable that they break down when they encounter the least difficulty. No one of us knows exactly his limitations. The sufficiently normal person will be able to meet all conditions of life without developing a mental disorder; he will find some adaptation to every situation that arises.

Further, in order to understand mental disorders, one must have a conception of the mechanism of regression. All of us must exert a certain amount of energy in pushing our way in the world; we seldom run long on our own momentum without some propelling force. Otherwise we tend to slide back. If we meet obstacles and our mental make-up is good enough, we make every effort to overcome them and persist to success. If our mental make-up is less good and we slide back, after a time we recover our energy and make another effort and succeed. If our mental make-up is still less good, after sliding back we tend to make less and less effectual efforts, and after a time cease to make efforts at all, and slide to lower and still lower levels from which, notwithstanding help from others, we are unable to progress. That sliding back is regression. Regressive forces are constantly operative within us, tending to draw us back from active combat with the world toward a state similar to that of our infancy, when everything was provided for us without effort on our part. The man who, during an illness, shows a childish dependency upon his wife or mother shows a regression. The mental chronic invalid, who makes such demands upon the patience and attention of her relatives, shows a regression into that state of dependency. The patient who has slumped into the deterioration of dementia praecox, through repeated failure of adaptation to sexuality in its broadest sense, shows a regression. Usually,

one finds some attempt at compensation; one sees that the patient seeks a ballast. A sudden, unusual interest in religion is, in most cases, indicative of threatening difficulty of adaptation and the effort to find a ballast. The crippled or sickly child may ballast his feeling of inferiority with fancies and tales of his ability and prowess. A regression is then another manner of adaptation to difficult situations, but it is an adaptation through running away and not through fighting. We all, from time to time, wish that life were easier, but if we spend all our time day-dreaming about happier conditions instead of making the effort to bring them into reality, we slide back into a pathological state. We go to the theater and enjoy the play, identifying ourselves with one of the characters. We identify ourselves with a character in a book that we read. In either case, we lose ourselves in greater or lesser extent in dreams and wish-fulfillment, but, if normal, we come back to reality, refreshed by our recreation in fancy, ready to again assume active adaptation to the world.

From the foregoing remarks, it should be clear that a mental upset depends upon one's ability, through his personality, to adapt himself to difficulties that arise and upon the nature and extent of the difficulties that he encounters. If the primitive instincts that he has inherited have not been well submerged within his personality, if he has grown up with a distorted attitude toward the world, if he has inner conflicts interfering with the main trends of his personality, if, in other words, his unconscious mind is not well ordered but, on the contrary, is seething and turbulent, with difficulty suppressed and constantly tending to express its potentiality in abnormal conduct, then he is prone to develop a mental disorder. The external situation would need be but mild, to break down the low powers of adaptation of such an individual. This is especially true in the case of some external situation which connects directly with a conflict in the unconscious mind, by following associated memories into the unconscious, like an electric current from one station to another through a maze of unconnected wires. In other words, the more directly the external difficulty is associated with unconscious conflicts within the individual's mind, the less marked the difficulty need be to create disorder, overcome an adjustment to the environment and produce a psychoneurosis or psychosis. The better ordered and more stable the individual's unconscious mind is, the greater the external difficulties that are required to break down his powers of adaptation. Thus, it is clear why some people get along so well in the world, why they do not break down under all sorts of marked difficulties, and why others break down markedly when they encounter relatively simple external situations. It is seen that, in some instances, the external situation is merely the relatively unimportant, exciting factor in the production of the psychosis, the flash of the percussion cap that sets off the explosion. In other instances, the external situation is the important factor in the etiology of the psychosis, being sufficient, through its enormity, to break down the relatively good power of adaptation of the individual.



It is true that human beings are much alike, that certain mental trends run through all beings like a red thread, and that, consequently, abnormal mental reactions tend, through their similarity, to fall into certain groups, but it is to be recognized that, within these groups, there are marked variations from uniformity, and these variations are the expression of individual characteristics of the personality. I believe that the chief difficulty in an understanding of mental disorders has been through the tendency to think of them as disease entities, which they are not. We may observe symptoms, all in one patient, which we generally think of as characteristic of various mental disorders as, for example, constitutional psychopathic inferiority, dementia praecox, manic-depressive psychosis, psychoneuroses. It is a common experience to have difficulty in the differential diagnosis of dementia praecox and manic-depressive psychosis, because symptoms which we consider to be characteristic of each disorder may be present in the one patient. We go about it in a sorry way if we merely try to fit the objective symptoms into one or the other diagnosis, and try in that way to tell if the patient will get well or not, see-sawing from one diagnosis to the other. The surer way is to make a study of the personality, of the manner in which the individual has made or has failed to make his adaptations to the world, and draw our conclusion about the prognosis from our knowledge of his reactions throughout his life, as well as from our observations of his psychosis. In the case of a profound stupor, in which there is no known symptom which aids us in differential diagnosis, our sizing up of the outlook must depend entirely upon our information about the patient's previous personality.

While an understanding of the mental make-up is of most importance in the functional mental disorders, it is also of importance in the organic conditions. Through that means, one can understand the various mental trends and different types of reaction in, for example, general paralysis. In that condition, mental trends, which had previously been held more or less well in restraint in the individual's adaptation to his environment, are liberated through the disorganization of his personality, and the consequent abandonment of efforts at adaptation, brought about by the invasion of his brain by the organic disease. From the standpoint of treatment, an understanding of the previous mental make-up is also of most importance in functional disorders; yet, in organic disease, it is frequently of advantage for the patient's comfort and his care, even if his actual organic condition cannot be relieved, to do what one can for the symptoms that are brought out of his personality by the organic condition.

In conclusion, it is well to remember that the time to treat mental disorders is before they develop as such, when they exist as relatively minor deviations from the normal personality, and when they express themselves through relatively minor defects in adaptation to the environment. Thus the shut-in type of mental make-up should be treated as incipient dementia praecox. With our limited experience, it would appear that, as should be expected, efforts at correction of bad types of mental make-up

are singularly successful in warding off a psychosis, even one as severe as dementia praecox.

Marsh-Strong Building.

#### DISCUSSION

**Edward W. Twitchell, M. D.** (909 Hyde Street, San Francisco)—While the influence of environment in mental disease must be admitted to be profound, there is great danger of attributing too much to it and undervaluing heredity. If a psychosis is not actually inherited, the "makings" are, and then much depends on the type of disease as to the part environment must play.

Broadly speaking, of course a mental disease is the result of failure of adjustment to environment, particularly when one goes beyond the more obvious reactions between the individual and his physical surroundings, but the actual inability to adjust is usually bound up with heredity.

The schizophrenic has always seemed to me to be relatively independent of environment to this extent, that he develops in a vast number of cases in spite of being surrounded by the best of conditions. In fact it is every-day experience to see these schizophrenics coming out of the least expected places, regarded even from a Freudian standpoint. The manic-depressive, on the other hand, whose psychopathic heredity is so generally demonstrable, in contradistinction to the apparently untainted heredity in so many schizophrenics, can be surrounded with safeguards that will protect him from outbreaks, or not subject him to strains which will precipitate them.

The revolutionary changes in living in the past three generations have made themselves felt in a variety of ways. We are suffering particularly now because the speed of adjustment of the mind to the change has not kept pace with that of the change. Many of the recent changes have not yet shown what their effects are to be. The future psychiatrists will tell us what are the effects of radio on the mind, which may be as definite as those of the X-ray and radium on the body and a new category of diseases may result from the loosening of hitherto imprisoned powers. It is fascinating to speculate on what new ailments will follow the eventual releasing of atomic energy.

**H. Douglas Eaton, M. D.** (1136 West Sixth Street, Los Angeles)—Careful evaluation of hereditary and environmental factors in any case of nervous or mental disease is essential to a proper diagnosis and to competent therapy of such a case. Some cases of nervous or mental disease are due to poor inheritance alone—others in the writer's experience, a much smaller number, are due to environmental conditions alone, but by far the largest number result from the interaction of both factors. As a rule, the individual who develops a psychoneurosis or psychosis starts with a diminished resistance which is still further lowered by adverse environmental conditions.

The relative value of each factor in the genesis of the final disorder is still a matter of theory rather than fact. The birthright of lowered resistance to mental or nervous trauma is not necessarily an unchangeable condition any more than is a similar lowered resistance to tuberculosis. Proper individual care of a large series of cases of good and bad inheritance starting at birth and continuing during the formative period would be the only adequate way to determine the relative value of poor inheritance and environmental trauma. This has never been done to the writer's knowledge. It is his belief that such early and long continued skilled individual care would cure many cases now classed as defective from birth. On the other hand, it would leave many cases of true organic weakness or instability.

Too much emphasis cannot be laid upon a comprehensive study of the individual case of nervous and mental disease. Therapy founded upon such

work will be valuable always and successful in an astonishing number of cases.

**Dr. Myers** (closing)—In closing, I should like to say that I have not desired to belittle the importance of heredity, but to combat the rather general tendency to believe that bad mental traits, psychoneuroses and psychoses are solely hereditary in origin. I believe that both heredity and environment play their part in the formation of personality or mental make-up, good or bad, and consequently that both have to do with the development of mental disorders. It seems to me that our knowledge of mental mechanisms must be markedly retarded, if we do not make an exhaustive study of the environment of our patients and, by environment, I refer not only to physical surroundings, but more particularly to the mental influence upon the individual of those persons with whom he has been brought intimately in contact. With the exception of intelligence defect with psychosis, I believe that environmental etiological factors in the development of an abnormal mental state can always be found, no matter how harmless the environment may superficially appear to have been. Furthermore, is it not true that the mental traits that we inherit were formed through the influence of environment upon our ancestors? It is well known that we acquire new physical characteristics through change of environment and that we transmit these characteristics to our progeny; further, that these new physical characteristics are strengthened as long as our descendants continue to remain in the new environment. Does not this truth hold in the same way in the development of the mind?

It is through our mental make-up that we adapt ourselves to the world and mental disorders, therefore, may be looked upon as maladjustment or broken adaptation to the environment. Inversely, in the study of mental disorders, we should investigate the influence of both heredity and environment upon each individual patient, with the expectation that, through such study, our knowledge of etiological factors, of mental mechanisms both normal and abnormal, and our efficiency in treatment will all be increased. The study is fascinating.

**The Workings of the Sheppard-Towner Law**—Release publicity from the United States Civil Service Commission reads: "Specialist in maternal and infant hygiene, \$3500 a year; assistant in maternal and infant hygiene, \$2000 to \$3000 a year; expert in maternal and infant care, \$3000 a year. Receipt of applications will close February 26. The examinations are to fill vacancies in the Children's Bureau, Department of Labor, at the entrance salaries named above, and vacancies in positions requiring similar qualifications. Appointees at an annual salary of \$2500 a year or less, may be allowed the increase of \$20 a month granted by Congress. Appointees will also be allowed actual traveling expenses and \$4 a day for subsistence when away from headquarters on official business. The duties of specialist in maternal and infant hygiene are to plan, conduct, or assist in investigations into the causes of infant and maternal mortality and morbidity in selected communities, rural and urban, with special reference to maternal and infant care at the time of confinement, and to make reports of such investigations; to inquire into the methods of prevention of infant and maternal mortality, and to conduct conferences with directors of bureaus of child hygiene, supervisors, and teachers of midwives. The duties of the assistant in maternal and infant hygiene are similar to those of the specialist, but in a subordinate capacity. The duties of the expert in maternal and infant care are to teach public health nurses the newer methods of maternal and infant care and related duties." Surely, comment upon this would be superfluous. President Coolidge has assured us that activities of the Federal Government will not expand this line of development while he is President.

## RATES FOR STATE MEETING

### SOUTHERN PACIFIC

Leaving Friday, Saturday, Sunday—Sixteen-day ticket (round trip), \$19.

Leaving Monday—Thirty-day ticket (round trip), \$22.50.

Lower berth, \$4.50; upper berth, \$3.60; drawing-room, \$16.50—two tickets; compartment, \$12.75—two tickets.

### THIRD AND TOWNSEND STREETS

#### Lark

Leaves S. F.—8:00 p. m. Arrives L. A.—9:35 a. m.  
" L. A.—8:00 p. m. " S. F.—9:35 a. m.

#### Sunset Limited

Leaves S. F.—5:00 p. m. Arrives L. A.—7:45 a. m.  
" L. A.—8:00 p. m. " S. F.—10:30 a. m.

#### Daylight Limited

Leaves S. F.—7:45 a. m. Arrives L. A.—8:30 p. m.  
" L. A.—7:45 a. m. " S. F.—8:30 p. m.

### FERRY BUILDING

#### Owl

Leaves S. F.—6:00 p. m. Arrives L. A.—8:50 a. m.  
" L. A.—6:00 p. m. " S. F.—8:50 a. m.

#### Padre (via Coast)

Leaves S. F.—7:40 p. m. Arrives L. A.—9:35 a. m.  
" L. A.—7:45 p. m. " S. F.—9:35 a. m.

### SACRAMENTO

#### Sacramentoan

Leaves Sac.—4:10 p. m. Arrives L. A.—7:55 a. m.  
" L. A.—6:15 p. m. " Sac.—9:55 a. m.

### LOS ANGELES STEAMSHIP RATES

Sailing from San Francisco—Tuesday, Wednesday, Friday, and Saturday.

Sailing from Los Angeles—Tuesday, Wednesday, Friday, and Sunday.

Standard accommodations (round trip), \$22.50.

De luxe accommodations (round trip), \$32.50.

Leaves S. F. Pier 7—4 p. m.

Leaves L. A. via P. E. Ry.—3 p. m.

Arrives L. A. via P. E. Ry.—11 a. m.

Arrives S. F. Pier 7—10 a. m.

### HOTEL RATES

Los Angeles Biltmore

Fifth and Olive Streets, Los Angeles

#### Single Rooms

\$5 to \$10 per day.

#### Double Room With Double Bed

\$7, \$8, \$9, and \$10 per day.

#### Double Room With Twin Beds

\$10 and \$12 per day.

#### Two Connecting Rooms

Three persons—one equipped with twin beds and one single, \$14 to \$22 per day.

Four persons—two double connecting rooms, \$18 to \$24 per day.

Each and every room has its own bath.

### The Economic and Military Importance of Health

—Public health activities show a strange line of demarcation in their relative solicitude for the sick and for the well. Unless a patient's malady endangers the health of others, his relief is viewed solely as a matter of charity, and the fact that his health, quite as much as the health of anyone else, is of economic and military importance is ignored. The distinction has, however, no sound basis in theory or practice. The health of the sick is possibly of even the greater importance; for one who is no longer an effective member of the community is a liability; he does not produce even the cost of his maintenance, is unable to defend himself, and requires the support and protection of others, who are thus kept from the fields of productive activity. It cannot be too strongly insisted that the more promptly and effectively the sick and injured are made well, the richer, the more powerful and the more contented and happy is the community.—Regulation of the Healing Arts, in Principle and Practice, by William C. Woodward.

## EDITORIALS

### FIFTY-THIRD SESSION OF THE CALIFORNIA MEDICAL ASSOCIATION

Don't forget to make plans to attend the Fifty-third Session of the California Medical Association, to be held at the Biltmore Hotel, Los Angeles, Monday, May 12, to Thursday, May 15.

The Los Angeles committee of arrangements consists of William H. Kiger as chairman, and the following colleagues, each of whom is chairman of the sub-committee indicated after the name:

George H. Kress (entertainment); Donald J. Frick (golf); W. T. McArthur, Harlan Shoemaker.

It is planned to have a dinner-dance and grand ball and president's reception on the evening of Tuesday, May 13. This will be in the large and beautiful ballroom of the Hotel Biltmore. Members of the Association will be able in this manner to have their own table and dancing groups, and at the proper time the Grand March will be formed and the reception to the president of the C. M. A. will take place.

On Wednesday afternoon it is proposed to have an auto trip to the beaches, with a stopover at one of the beach country clubs. The program for this will be in charge of Kress.

A golf tournament will be staged for each morning of the session, and this will be under the supervision of Donald Frick. There are thirty-two golf courses within a short distance of Los Angeles, so there will be plenty of room for everybody. It is planned to have a cup for the winner of each day's tournament, which the winner will be able to keep as a souvenir; and in addition there will be a large and handsome president's cup, which will only go to that member of the Society who will be able to hold the same as winner of the golf tournaments for three different years.

Other plans in the matter of informal smokers, medical fraternity meetings, and so on, are also under way. The meeting gives every promise of being replete not only with a most satisfactory scientific program, which is now complete and published on pages 168-180 of this issue of CALIFORNIA AND WESTERN MEDICINE, but with a large number of entertainment features that should appeal to out-of-town as well as to local members of the Association.

Remember what Roosevelt said about what a man owes to his craft, and attend this annual session. You will receive much of interest and importance. What is much more worthwhile, you will have opportunities to give of your own ideas, experiences, and knowledge.

Information regarding hotel rates, transportation rates, and time-tables is published on page 157 of this issue.

### THE PROBLEM OF GIVING

Andrew Carnegie is credited with once having made the statement that intelligent giving was a far greater problem than the accumulation of wealth. Experiences both before and since Carnegie's time have demonstrated the wisdom of his remark. The subject has its greatest importance in the health field, because of the human appeal in promoting better health service.

It is our present purpose to call attention to a phase of the giving problem now acute in a California community, which apparently has no parallel in the history of private munificence. Essentially, the situation is this:

Colonel Simeon J. Murphy, a prominent and wealthy California citizen desired to present a memorial to his father's memory to the citizens of Whittier, a small city in Southern California. After consulting his physician and other advisors, he decided to build and equip a fine hospital, costing about \$325,000. A splendid idea which one would think would have the endorsement, support, and cooperation of all citizens in its execution. Not so, however; difficulty after difficulty has been thrown in the way of the execution of the plan, until it is reported that the benefactor is quite disgusted and is awaiting an opportunity to revert to his estate the several hundred thousand dollars already spent.

In the first place, California not only is without laws that lend themselves to encouraging private philanthropy, but the laws are in some instances inimical to the development of the practice of private giving. Finally, after prolonged discussion, the legal technicalities were made as harmless as possible, and the project was undertaken. The deed of gift was made to the citizens of the city through the city council as their representative contingent upon certain conditions being continued in perpetuity. The most important of these conditions was that the city council should appoint a board of trustees who were to have the usual complete control of the trust. One condition required that the hospital site, located in the city park, should be furnished by the city. Another condition was "*that said hospital should be so conducted and managed that it will at all times rank as a Class A institution.*" There were several other conditions in the trust which need not be discussed here, except the very important one, that, in case the conditions of the trust were violated, the property and other assets were to revert to the private estate of the donor.

The city councilors appointed the board of trustees, and a number of conferences between the donor, the trustees, and the city councilors were held. It is to the credit of all these interested persons that they settled the numerous questions and problems with the right spirit, and at no time has there been any serious trouble among those charged with the execution of the provisions of the trust. A splendid fifty-bed hospital was built, equipped and personneled, and was so successful that it soon be-



came too small and a new forty-bed annex has just been added by the munificence of the original benefactor.

After the hospital was in successful operation, the osteopaths and chiropractors claimed the unwarranted privilege of treating their patients in the hospital. Their request was refused by the trustees, and the refusal was sustained by the city councilors and by the donor himself in writing. This experience suggested the advisability of accurately defining the phrase "Class A hospital." This was done in a hospital by-law, which, with all other by-laws, had the endorsement of the staff, consisting of the educated doctors of medicine of the community; approved by the trustees, the city council, and by the benefactor himself. When the new annex was built, the whole question of the purposes of the giver and the conditions necessary to maintain the complete hospital as a worthy agency of scientific medicine with its staff and medical privileges limited to educated physicians was restated and re-endorsed by the philanthropist, the officials of the municipality, and the trustees.

#### ENTER POLITICS

While this philanthropic citizen is still living, and in spite of his own signed wishes on the point which have been agreed to by the city officials and the trustees, and in defiance of his public protests, certain groups of people, whose motives surely need no comment, have secured the necessary signatures and have placed on the ballot, to be voted upon April the 12th, a local initiative directing that the hospital be opened to all "doctors," regardless of educational qualifications, who hold any sort of a license from any of the several so-called boards who license persons to treat the sick in California. This local initiative also carries a severe penalty clause.

If the hospital is to live up to the meaning of "Class A," as used in the trust and as defined in a by-law having the endorsement of the trustees and Colonel Murphy, it should be on the list of hospitals "accredited" by the American Medical Association. This official accrediting agency has several important rules of good hospital conduct. The most important one, so far as The Murphy Memorial Hospital is concerned, is that only those holding the degree of doctor of medicine from acceptable bona fide institutions of learning may practice in the hospital. This educational requirement is above the fluctuation of political standards, and it is quite broad enough to include all those really adequately educated to treat the sick. The methods they apply may be any that have reasonable basis in scientific fact and experience. The term "legally licensed" to treat the sick in a state with adequate laws effectively enforced ought to be sufficient; but the laws of California and several other states are so inadequate and so poorly enforced that the legal standing of a "doctor" is not and cannot be used as a basis of rating his educational qualification and, therefore, of his privilege of practicing in a hospital "accredited" as a legitimate agency of scientific medicine. The people of Whittier should be assured that, if they were to succeed in passing their local initiative and it should be sustained in law, the hospital will thereby forfeit its present oppor-

tunity to be officially "accredited," and thus would pass below a "Class A" institution as defined in its approved by-laws. How much this will mean to the community, we will discuss at another time. It may be said in passing that no community is sufficient unto itself.

#### A SAD SITUATION

The proceedings in this situation no doubt will have far-reaching consequences upon private philanthropy in health fields. If this, or some other similar initiative should pass, an amazing amount of bitter controversy and litigation immediately becomes possible, by which the community will be divided and the sick will suffer.

That the initiative violates the conditions of the trust there can, of course, be no question. If so, the property reverts to the estate by a definite provision of the same trust.

If the city councilors who acted in good faith had the power to accept this splendid trust, can this initiative make null and void or modify the terms and conditions of a large financial transaction already long since closed? It appears that the action of the city council was either valid or invalid. If valid, no arbitrary political upheaval can abrogate the action; if invalid, then the trust has no legal existence, and if repudiated, as now proposed, the trust reverts to the original donor. The election will, therefore, merely determine how many people there are in this particular community who believe in regarding a trust as a "scrap of paper."

Is this initiative itself legal? Will it be sustained by the courts? It is so loosely drawn that it is susceptible of many interpretations.

There is no objection to any group of so-called "doctors" building hospitals or inducing philanthropists to build for them. They may follow out their peculiar theories in their own hospitals, so long as they comply with the law. That is precisely the demands of educated doctors of medicine for themselves, and the hospitals and other agencies of medicine they utilize. It is the stand of the official accrediting body of their own national organization and, in the case in point, is the wish of the benefactor. The two groups, the educated physicians on the one hand, and the inadequately educated group on the other, cannot be scrambled. Neither can the agencies through which they operate be mixed any more than can oil and water. The greatest weakness of all the non-medical groups is that they are constantly fighting to be attached to and become part of the work of educated physicians. One would think that if they really believe in their methods they would want to stand out for themselves and not be "barnacles on medicine," as they have been termed.

There are less than 100 beds in less than five hospitals in the state operated by or for the inadequately educated medical cultist groups, while there are over 40,000 beds in over 500 hospitals in the state operating as agencies of scientific medicine. This shows conclusively that the patients of cultists do not need hospital accommodations, or that they have been derelict in meeting the hospital need for the care of the sick.

### DUTIES OF COUNCILORS OF THE C. M. A.

In publishing the proceedings of the last meeting of the Council of the California Medical Association in Los Angeles, one resolution was deliberately held out for editorial mention. That resolution reads as follows:

"Resolved, That it be understood to be a duty of the Councilor for each councilor district to visit at least one meeting a year of each constituent society within his district; and that he, in the discharge of this duty, should arrange with the secretary of the society to be visited for the program for that particular meeting; and that each councilor report on the execution of this part of the program at the State meeting."

If we are to progress in medical organization work, the letter and the spirit of this resolution must be faithfully carried out. It is difficult to do: The councilors of our association are, like the other members, very busy practicing physicians; they already give much of their time to the serious consideration of the complicated and difficult problems of medicine that come before them in ever-increasing numbers at each meeting. These meetings are held in different parts of the state and involve not only loss of time to these executive officers, but a not inconsiderable outlay of their own funds. To ask them to comply with the resolution is to add to the responsibilities, duties and expenses of their office. Yet this work must be done, if we are to go ahead, and only men like councilors, who are familiar with the problems of the organization, are really prepared to meet the local situations in their various communities.

It is to the credit of our councilors that they, almost without exception, attend their meetings with regularity, and devote whole days and oftentimes a good portion of the nights to consideration of problems in which we all should be interested.

### TAKING THE "CLINIC" TO THE PATIENT

An interesting movement in providing skilled care for patients is gaining headway in sporadic centers in California. Essentially, it consists in taking the specialist to the patient rather than the other way round, which is the customary procedure.

By way of illustration, which we could repeat many times, a small community has, let us, say, several crippled children, some of them poor and others of well-to-do families. The nearest specialist in orthopedic surgery may be twenty-five or three hundred miles away. Instead of going to the tremendous expense of transportation for patients and attendants, hotel expenses for attendants, and hospital expenses for the patients, with all sorts of additional expenses of transients in the city, the local physicians and authorities get their patients together in their home town and arrange for the specialist to come to them. With the preliminaries cared for by local initiative, the specialist may readily render a phenomenal amount of service in a very limited time. The after care of the patients is carried on by the family physician, either in the local hospital, or in the home. If wisely developed, this movement gives promise of

going far in rendering better service at less cost to many people.

Members of the Hospital Betterment Service have watched the growth of this movement, particularly in Southern California, with growing interest and appreciation of its possibilities in many ways. There are also dangers that threaten. So far, it is not a concerted movement promoted by anyone. It should be taken hold of by physicians' organizations, guided and developed along constructive lines. It offers possibilities in every medical specialty. Possibilities of better medicine for everyone at greatly diminished costs to the public, with adequate compensation for the specialist and the family physician.

### THE COOLING EFFECT OF MENTHOL

The cause of the local cooling effect on mucosae exerted by menthol appears to be more than a case of volatilization produced by any volatile agent whatsoever. That is, there appears to be a direct stimulation of cold nerves, indicating a peculiar specificity or predilection of this agent for these structures. This is indicated by the recent work of Heubner of the Pharmacological Institute at Göttingen, who studied the question in human subjects.

By passing air at different temperatures through a tube containing menthol, Heubner found that there was produced invariably a cooling sensation in the mouth and nose and on the tongue, gums, lips, and conjunctiva. The skin gave variable responses. This was due to stimulation of the cold sensory endings by, and not to physical volatilization of, the drug, because when air at a temperature of 37.5 degrees C. was passed on mucosae the sensation was indifferent, but the moment that mentholized air at the same temperature was admitted a cooling sensation occurred. Hence, it followed from this that the nerve endings, which appreciate cold, were irritated or stimulated directly. These nerve endings not only were stimulated at the time of the application of the vapor containing menthol, but also remained irritable after the menthol was removed because now a cooling from any source could be more readily appreciated.

Presumably, other effects as a result of stimulation of sensory cold endings were reflex stimulation of the higher centers, including the vasomotor center. Stimulation of the vasomotor center would result in peripheral vasoconstriction, and this, in part, might explain the subjective sensation of relief in, or clearing of, the respiratory passages experienced by patients treated with various mentholized applications. This effect would tend to lessen hyperemia. In this connection, it will be recalled that McGuigan of the Pharmacological Laboratory at the University of Illinois pointed out that the menthol or volatile oil (peppermint oil) type of medication lowers the surface viscosity and tension of edematous and mucous fluids through a strictly physical effect on these secretions. The result of this is lessened tenacity and increased fluidity of such secretions facilitating their removal by expectoration.

It appears from all this that menthol acts as more or less of a specific stimulant to cold nerve

endings, reduces local hyperemia reflexly, and facilitates the removal of secretions by direct physical action, and, therefore, is not merely an inert deodorant and placebo.

Heubner, W.: Arch. exp. Path. Pharm., 1923, 96:330, "Menthol als Beispiel eines erregenden Giftes."

McGuigan, H: J. Am. Med. Assoc., 1921, 76:303, "Menthol and Peppermint in Acute Catarrhal Conditions of the Respiratory Tract."

### MEDICAL FICTION

The cause of scientific medicine is being injured by what may be appropriately termed medical fiction. It is not called that to be sure, but it finds its origin in the same sort of fanciful dreams. It is promulgated in the same breezy style, and it is motivated by the same underlying principles. Like some other fiction, it plays with perverted truths, twisted half-truths, or more often, it is the creature of the imagination. Like some other fiction, too, it utilizes old and substantiated scientific knowledge; old and obsolete and long since disproved theories, or even the meanderings of the medical theorists of other days, and by dressing them with new verbiage, promulgates them as new contributions to science.

If most of these modern medical—including public health—fiction writers had the true novelist's instincts and the facility to write well, they would do incalculable harm. Even their choices of subjects is held in fairly narrow fields. One of their favorite sports is to launch an attack upon the family physician. They attack his inadequate education, his craftsmanship, and even his integrity. They seem to think that he is only fit to sign the death certificates of patients of these reformers, and "near doctors" and alleged public health experts of one kind or another. Two of their other luscious subjects are "child health" and "psychology." Here, again, they can rarely complete a paragraph without sticking a barb in the "family doctor."

Most of them in these and other fields of medical fiction rehash things more centuries old than they themselves are years old, and promulgate them as "new." They love to revel in the idea that prevention of disease is a new subject; that nothing was known about nutrition and other branches of physiology or psychology longer than a few days or weeks ago. They appear to be totally ignorant of real medical history, or if they are not, they are as unspeakably vicious as their writings indicate. These man-handlers of medical truths are finding hard sledding to get their "stuff" over with medical editors, but they are still in clover with book publishers and "news" distributing agencies. Their strong and enlarging forte is in the "free" bulletins given out from clinics, health centers, and various political agencies of government.

There is plenty that is "new" about medicine that ought to be promulgated. Judged from their writings, it is also new to these expert promulgators. There are old truths that ought to be restated, and restated where possible in language understandable by everyone. But why is it necessary to attack the great mass of educated physicians and insult the intelligence of even other intelligent readers of his history, in efforts to advance themselves and the more

general understandings of the simple truths of health?

Above all, what sorts of souls, visions or hearts have the few of these medical fiction writers who are doctors of medicine and who ally themselves with and support emotional uplifters and go them one better by attacking their fellows who graduated from the same schools, often in the same classes as themselves, and who are carrying our real health burdens now as they always have carried them?

### SHALL WE PROTECT OR DISCARD "DOCTOR"?

What a confession for a Government to admit its inability to protect against impositions and fraud a title as important to progress as that of "doctor"!

What a miserable compromise with knavishness to attempt to abolish the word "doctor" that is woven by college looms so deeply into the fabric of civilization!

Why in the first place pick upon our college degree of "doctor"? Some people forget that doctor is not a political or other title conferred by the State, but that it is wholly an expression of educational attainment made by universities and colleges, and constitutes the highest degree they award. In this respect, as well as that of usage and understanding, it is only one of several other terms, like "professor," that have been prostituted to a nauseating and disgusting extent.

If our State Government will not protect the use of these terms and not only admit their inability to do so, but frankly attempt by law their destruction, will they be able to succeed? When weeds grow up in the farmer's corn-field, he does not dig up his corn or move to a new field, but destroys the weeds and protects his corn.

We believe that the vast majority of our people, whether themselves physicians, professors, or not, will disapprove any attempt to destroy these appropriate terms which have come to mean so much to so many people. We believe, furthermore, that the majority of our people will support legislation and the enforcement of laws to protect hard-earned titles. At least they will be given the opportunity to do so when the next legislature meets.

Two years ago, after an exhaustive study of the needs of the situation, what was known as the "Medical College Bill" was prepared by physicians and introduced into the legislature by the League for the Conservation of Public Health. It passed the senate and died in a committee of the assembly. That bill will be before the legislature again. It provides that any school or college purporting to teach the healing art and confer any sort of "doctor" degree must comply with certain reasonable requirements. This would stop the output of diploma-mills, whose principal occupation is to issue a diploma with doctor on it, and it would thus correct a situation at its source.

The last legislature passed a law all but unanimously that placed adequate safeguards about "doctor." At least it required each "doctor" to make public his authority for use of the title. This bill



was vetoed by the Governor of the state. His reasons for so doing were not popular at the time, and they are growing more unpopular as times goes by.

For the Governor's administration to now make an attempt to destroy by law what they refused to protect, because the situation is so hopelessly bad, will be another blunder, and place the Governor's administration in a more damaging light than it now is.

The "Doctor bill," as it was called, for the protection of those who are entitled to its use, as well as the protection of the public, will be again before the legislature. When this measure and a destructive one introduced by the administration on the same subject meet in the legislature, there ought to be further opportunity for assaying values.

We are convinced that such destructive legislation will never secure the endorsement of the majority of doctors who hold this enviable degree from good schools, and which they spent so many hard years of study and sacrifice to secure.

#### COUNTY HOSPITAL FEES

There is a gradual spread of the practice of county hospitals in California not only to charge patients fees, but to develop an ascending scale of fees. Leading the promotion and development of the idea are some of the largest and most prominent of the county hospitals, located in centers where there is not the excuse of insufficient number of beds in other hospitals.

Some of the plans and schemes that are employed in deciding how much these various grades of citizens shall pay would make a Russian Communist dizzy. They grade people like pigs, as a, b, c, d, etc.—classes with a lot of algebraic formulas with these letters to make them fit any pocketbook. In fact, some of these hospitals have already reached a plane whereby almost the only "free" service about them is the doctors' services. Some of them are reporting, apparently as something to be proud of, that they have only small percentages of patients who do not pay, and that this percentage is decreasing year by year.

Recent reports from several Eastern centers show that these "free" hospitals and other "charities" are collecting from 40 to 75 per cent of the costs of all their services from the people they are serving. They are beginning to point with pride to the millions they are collecting from those who the general public believe are getting free treatment.

What is called "business methods in charity" is swinging rapidly into a dangerous situation which, unless corrected, will produce unlooked for reactions. Some such reactions are already making themselves quite apparent in some centers where the operation of charity as a business is oldest.

Whatever one's opinion may be about religion, the first instance of permanent progress along lines contrary to the teachings of the Master has yet to be noted by historians. He spoke unmistakably and emphatically about "charity" and "the poor."

#### A SIGN OF THE TIMES

New Jersey doctors are much excited, and with good reason, over a bill pending in the Legislature to create a special health board called the Bureau of School Health, under the control of the Board of Education. As a sop to the medical profession, a "regular licensed practitioner of medicine" is to head this new bureau.

In discussing the proposal editorially, the Journal of the New Jersey Medical Society says:

"It is expected that the measure will have the backing of insurance, manufacturing, and lay health organizations. It will probably be opposed by the associations of physical education, teachers, who, in 1917, while the profession was unaware, had a program of physical education set up instead of a program of health, one of their number now being a pseudo-director.

"Every doctor should join the battle. Do we wish to be beaten by a crowd of 'gym' people? Shall the people be allowed to suffer to enable one 'gym' man to thwart public welfare? Every doctor should call upon or call up his legislators and urge the passage of the School Health Program bill."

Of course, to retain a health program of education and practice in the hands of a physician is important. But why have two boards?—one for school children from ? age to ? age, this board responsible to the educational authorities; the other the regular health board for the rest of our citizens, this board responsible to the usual Government authorities and to the public for the carrying forward of all phases of a better health program.

The real reasons why the New Jersey school authorities, and those of many other states moving in the same direction, want their own health board under their own orders are perfectly clear to any thinking person.

#### THE TWELVE-HOUR DAY FOR NURSES

To Californians it is almost like reading history to watch the controversy between doctors, nurses and hospitals and the public over the nurses, demands for a twelve-hour day. In Buffalo, New York, for example, the fight is bitter and aggressive.

The twelve-hour day, as it is called, is in quite general use in California and has been for some years. The exceptions are, that nurses will look after chronics and convalescents on a twenty-four-hour day basis, provided reasonable hours for recreation and sleep are provided. This, in our opinion, is as it should be. If nurses are really needed, and if they really work while on duty, twelve hours is rather more than less to ask of them. When there are only a few things to do for the patient at a certain few times during the twenty-four hours, one nurse can easily handle the task and, with a little reasonable understanding with the doctor, have plenty of time to sleep and look after her own health.

Most worthwhile nurses like to be kept "busy" while they are on duty, and to be free when not serving the sick.

The argument that, reducing a nurse's day to twelve hours will increase the cost of sickness, while probably a fact, is nevertheless no argument. Sick-

ness costs less also in a "firetrap" hospital, but no one would condemn fireproof buildings for hospitals on that basis.

No, nurses are not unreasonable in asking for a twelve-hour day. They were, and are, foolishly advised in using the methods they sometimes employ in bringing the shorter day about.

The costs of sickness ought to be, can be, and will be decreased somewhat by better organization, elimination of waste, substitution of necessities for luxuries in buildings, equipment and otherwise, but we should not try to fasten "sweatshop" methods upon any group of employees in order to make a showing.

It is not the twelve-hour day but other dangers, and some of them serious, that threaten the standing of this splendid and important technical group of the medical and health agencies. Of the many dangers that threaten, the most important and far-reaching is the overspecialization in nursing organizations and among individual nurses. The second greatest danger is, that too many nurses are so conducting themselves as to merit the designation of super-nurse, etc., that is being bestowed upon them in ever-widening circles.

With wise leadership among themselves, these and other pitfalls may be avoided. We hope they may and that the world may continue to hold nursing as the sacred service-loving calling that Florence Nightingale made it.

#### WHO IS RESPONSIBLE FOR THE CHILD?

Numerous educational and political documents now being issued from time to time make it perfectly apparent that many of our organizations consider control of the child a public duty rather than the responsibility of parents, which was the vogue when we were all youngsters. These organizations are making headway and it looks very much as if in the course of time they might win the point they are striving for.

We wonder how many people think what will happen after this point is gained.

One thing that already is happening is indicated by Mr. J. C. Astredo, probation officer of San Francisco, when he says, "THERE SEEMS TO BE A WILLINGNESS UPON THE PART OF PARENTS TO LET THE COMMON-WEALTH ASSUME EVER-INCREASING RESPONSIBILITIES FOR THE CARE AND DIRECTION OF CHILDREN." Mr. Astredo is in a position to secure accurate data upon subjects of this character, and his fair-mindedness in presenting this data cannot be questioned. Statements of this kind cause those who are trying to push the nation headlong into a difficult situation to pause and consider what they are doing.

Many mothers need help and many children need help, but could we not plan so as to render assistance of whatever character to or through the mother and thus prop up and support the independence and integrity of the home? Surely our people, when they know the facts, are not ready to make of motherhood a "brooding plant" and the weaned child an exclusive responsibility of the commonwealth.

#### THE FORDS OF MEDICINE

Every so often some new genius discovers again the old, old formula that everybody can have expensive hospital and medical care except the "poor middle class." They say the rich can buy it and the poor can have it for nothing, but those "middle class" people can't pay present costs of doctors' service or hospitals.

Nearly every one of these financiers expects either that wealthy people will provide subsidies, that the costs of hospitals and doctors' fees be reduced, or that the state take over all hospital, and, consequently of course, all medical work. The answer, of course, is to first catch your bird.

Henry Ford decided that there were millions of poor "middle class" people—God bless them—who wanted, and therefore should be allowed, to ride in automobiles. By a combination of business genius, energy, and common sense he has been able to provide them a car. It travels and delivers its passengers at their destination, but it does not satisfy, and every owner wishes for a *better* car more intensely than he originally wished for any car.

The only possible way, except by gifts from persons or the state, by which hospital service and medical fees can be brought much below their present scale is, by doing what Ford did to automobiles—put cheap material together in a "standardized" plant and use unskilled drivers. Such tactics will neither satisfy the demands of the sick nor give the service they should have.

Handing the problem to the state does not decrease the cost. Good government hospitals cost every bit as much, and even more than others, to operate. There is plenty of voluntary sickness and health insurance offered by many reliable companies at premium rates that even the "poor middle class," which, by the way, include most physicians, can pay. Instead of wasting our time on economic absurdities, why not spend more effort in pointing out to people the available practical remedies that exist?

Henry Ford, be it remembered, tried the hospital game. He has a fine plant, which charges only quite moderate rates for service, *but* it takes a Ford to absorb the deficit.

A very large percentage of the people who can well afford to pay costs of sickness, and for luxuries if they want them, carry every form of sickness, accident, and health insurance. They do it as a good business policy. Why in the name of justice should not others who need such protection pay the small premiums it takes to carry it?

#### NEVADA MEDICAL ASSOCIATION

The annual meeting of the Nevada Medical Association will be held this year September 12 and 13, at Bowers Mansion near Reno. The committee having the arrangements in charge is already active, and is preparing a very attractive program, including some unusually promising social features.

Physicians interested in the development of the program should communicate promptly with the secretary, Claude E. Piersall, Masonic Temple, Reno.

The complete program of the session will be published in CALIFORNIA AND WESTERN MEDICINE in due course of time.

### SHALL PHYSICIANS OR LAYMEN DIRECT AND CONDUCT HEALTH WORK AMONG SCHOOL CHILDREN?

Of all health movements there is none more definite, better organized or more certain of its program than are school administrators in their campaign to have teachers and not physicians and health boards control the practice of diagnosis, prevention and curative medicine among school children.

Government publications paid for out of Federal taxes are extensively utilized for extensive propaganda. We have called attention before to what is said in some of these publications, and there is now before us a recent number of "School Life," which contains interesting reading. One writer, and he is a physician, outlines the history of physical education and health work. Among other illuminating statements we find these:

"School health agencies now control the machineries of communicable-disease prevention and control. In other words, the school health service, including its staff of physicians, dentists, and nurses, is best prepared to handle most of the positive health and physical efficiency program of the school."

"In its attempt to assert itself and to convince itself and the public of its value, finding its traditional field fairly well covered by the school health movement and wishing more or less independence of the school health agency, physical education began to cast about for other objectives outside of those concerned with the body. It found them in a large measure in certain mental, moral, and social values, that physical education claims are the invariable products, particularly of games, sports, and athletics. As a result, in at least one state there is a state director of physical education and a state director of school health."

"Let us assume that both the school health service and physical education are fundamentally interested in the positive health and physical efficiency of school children. If this is true, there is no reason why separate administration should be maintained. Independent supervision leads to duplication, friction, misunderstanding, economic waste, and, worst of all, to poor results. Some phases of the work may be overemphasized, others slighted."

Other government publications emphasize the rapid gain that is being made in wresting the control of medical work in schools from boards of health and placing it where they claim it belongs—under control of boards of educators.

### COUÉ

"The more stupid they are the easier they get my theory," said Emile Coué, in an interview with Mollie Merrick of the San Francisco Examiner, upon his first arrival in San Francisco. Continuing, he pictured the "dumb," the "unconscious," the "mentally nil" as enjoying the benefits of the Coué philosophy with greater facility than do other persons.

Quite a compliment (?) to his followers, but that is his business; and that's all for Coué so far as we are concerned.

### WHY NOT TRAVEL BY WATER

to the annual meeting of the California Medical Association?

In this number we carry a full-page advertisement of the Los Angeles Steamship Company, offering rather remarkable inducements in rates and comforts to those members, particularly those from Central and Northern California, who will enjoy going to the Southland by steamer. The service and schedule of the steamers Yale and Harvard offer a very convenient and pleasant way to the meeting. There will be a sailing from San Francisco at 4 p. m. Saturday, May 10, putting passengers into Los Angeles at 11 a. m. Sunday the 11th. Return sailings will be Friday, May 16, and Sunday the 18th, at 3 p. m. from Los Angeles, arriving in San Francisco at 10 o'clock the following morning. There will be additional sailings southbound on Tuesday, Wednesday and Friday, and northbound on Tuesday and Wednesday. So you may enjoy a week-end vacation and rest both going and coming from the meeting.

Very low round-trip fares include berth and meals. Special entertainment features will be provided by the ships' orchestra in the ballroom.

### "CONGENITAL DISEASES"

During the first eight months of 1923, according to the State Board of Health, 46.3 per cent of the deaths among infants was due to "congenital" diseases.

It would be interesting, but unprofitable in the present state of knowledge and statistics, to speculate upon the proportion of these deaths that parents are responsible for. It would likewise be worthwhile, if possible, to trace the causes back through more distant ancestry and distinguish these from the influences of antenatal diseases and injuries to the child.

Another point more important perhaps than any of these would be a determination of the morbidity among the 53.7 per cent of infants who did not succumb to "congenital diseases." Undoubtedly, morbidity and injuries among infants before birth constitute not only the basis of many health failures in after life, but are unavoidably included under other headings in mortality statistics.

### "THE KINDERGARTEN AND HEALTH"

Under this title, the Bureau of Education, Department of the Interior, Washington, has issued another pamphlet containing information of interest to physicians.

The position is taken that the most important function of a kindergarten is to serve as a public health station connecting the infant welfare station on the one hand with the health service under control of the public schools on the other.

Copies of this pamphlet may be secured from the government printing office in Washington.



## Medicine in the Public Press

**Board of Medical Examiners Endorse Doctors' College Bill**—In a report to the Governor, a committee of the Board of Medical Examiners endorse the principles contained in Senate Bill 364, known as the medical college bill, introduced by the League for the Conservation of Public Health in the 1921 Legislature. That bill passed the Senate by an overwhelming majority, and was delayed and obstructed by a hostile committee in the Assembly, to which it was referred. It will be reintroduced at the next Legislature, and the strong and united support of the Board of Medical Examiners will be of help in securing its passage.

We hope, in the interest of public health, that Governor Richardson, who was not in office when the bill was before the Legislature, will endorse the recommendation contained in the official board's report, and lend his support to a movement that strikes at the source of legalized quackery in California.

**'Those "Controlled Surgeons" Again**—We revert again to Mr. William G. Shepherd's article in Harper's Magazine about "controlled surgeons" who are out to save the public from incompetent and dishonest surgeons and whose names he could not give to the public because of their alleged ethics, supported by an oath "on the honor of a gentleman," that they would not utilize personal puffery to gain their ends. Three prominent members of the organization excepted by Mr. Shepherd in his drastic arraignment of the medical profession were in Vancouver recently on their way to the Orient. The Vancouver Sun, among other encomiums about these "controlled surgeons," says:

Dr. William James Mayo is one of the renowned Mayo brothers whose outstanding work in the surgical world has made their clinic at Rochester, Minnesota, known the world over. In 1915, in conjunction with his brother, Dr. Charles Horace Mayo, he donated the sum of \$2,000,000 to establish the Mayo Foundation for Medical Education and Research at Rochester, in affiliation with the University of Minnesota. Dr. W. J. Mayo was born at Le Sueur, Minn., June 29, 1861, and gained his M. D. at the University of Michigan in 1883, later being awarded the A. M. degree. In 1905, at Edinburgh, he was made a Fellow of the Royal College of Surgeons. Other degrees held by Dr. W. J. Mayo and the year in which they were granted are LL. D., University of Toronto, 1906; University of Maryland, 1907; University of Pennsylvania, 1912; D. Sc., University of Michigan, 1908; Columbia, 1910; F. R. C. S., England, 1913; Ireland, 1921.

Dr. Franklin H. Martin, director-general of the American College of Surgeons, is also a distinguished man in his profession. His research work has been of great value to the medical world. Dr. Richard H. Harte is also widely known and has contributed many valuable works to the world of medical science. He is the author of the "Handbook of Local Therapeutics." During the Great War Dr. Harte distinguished himself serving overseas, and his work received much recognition from allied nations. He was mentioned in the dispatches of General Haig and received the British Order of St. George and St. Michael. Dr. Harte was made a "Companion of the Order of Leopold" by the King of Belgium, and "for conspicuous service rendered to the British Expeditionary Force" was made a Fellow of the Royal College of Surgeons, Ireland.

This intimate and probably accurate biographical data has earmarks familiar at least to all men engaged in any way in publicity, and its source probably will not be misunderstood by many intelligent readers. This memorandum is not intended as an arraignment of these prominent men for their newspaper publicity. They are all excellent and prominent physicians. What we would like to know is, have these men lived up to the standards Mr. Shepherd says these "controlled surgeons" are sworn to sustain?

**Reptiles and Angels**—Doctor, some evening when you are too tired to talk, gently remove your telephone receiver, get into a semi-reclining position, light a good cigar, pick up your March Atlantic and read Mr. Charles D. Stewart's delightful article with

the above title. A copy of this article would save you many wearing explanations, and be good medicine for some of your more intelligent "heart cases."

**Does This Apply in California?**—Under a medical slang title of "The Challenge of the Chronic Patient" (Survey) a writer, in discussing the present service being rendered to patients suffering with chronic diseases, says: "A recent survey of the leading institutions for chronic patients, most of which call themselves homes for incurables, shows that almost without exception the scientific study of disease is ignored, and even the importance of medical treatment is minimized. Apparently, these institutions work on the principle that their patients are incurable, beyond all hope of even partial rehabilitation, and that their sole function is the maintenance of a home where such unfortunates may linger until they die."

"... It is not only the individual who suffers from this neglect. Many inmates of almshouses remain public pensioners for years. They are accepted as human derelicts who, to appease the rudimentary public conscience, must be supported and maintained, preferably where they will not be seen, until death relieves them and the taxpayer from further worry and responsibility. Yet many of them, if they were to get a fighting chance, could be rehabilitated and returned as useful members of the community."

**Selma School Nurse's Report Contains Interesting Features**—The nurse says in her medical report that all children have been weighed and "it was gratifying to find that many of the children have gained since last weighing. . . . Four children have been taken to doctors, ten to the optometrist, and one sent to the dentist."

**Is the Quality of Medical Practice Improving?**—"In spite of the attainments of preventive medicine," says Hospital Social Service editorially, "the vast majority of people of New York State and an enormous percentage of the people of the United States, over 90 per cent probably, have, to a large extent, the same kind of medical service, or in many instances a poorer quality of medical service than they had twenty-five or thirty years ago. Even where public health agencies are thickest, an all-round preventive service is not universal in any given unit of population. Certain sanitary and isolation laws are the only health measures which affect every member of a given community. Other health measures such as work with malnourished children, maternity care, and even tuberculosis clinics are sporadic, affect only a limited clientele and, however sensitive, do not reach all the people who might benefit by them."

**And I Learned My Medicine from Her**—A new idea in diet has recently been promulgated by a dietetic "savant." It is to the effect that a person's temperament is made and changed at will by the effects of vegetables. Potatoes, it is said, "balance the mind and calm it." Carrots are excellent antidotes against jealousy; spinach speeds up ambition; beans develop the artistic sense; parsley produces sadness; but the good old-fashioned baked beans stimulate the desire for work. A wag has said that this savant's findings for the first time explain why the Irish race have such calm temperaments. To secure all of these results, the patient must plant, cultivate and harvest the vegetables with his own hands, and for that statement, we will forgive his dreamings.

**Reaction Against School Authorities Practicing Dentistry**—From New York and several other centers, the practice of dentistry by boards of education is being severely criticized and in some places stopped altogether. The charge is being made that schools have no more business practicing dentistry or medicine—they are doing both—than they have to practice law or engineering. It is not understood

that there is opposition to the movement for good dentistry for school children as well as for all other persons, nor is their criticism of legitimate movements to insure free dental work for those who can't pay for it. The main point in the opposition that is cropping out in many places is against this work being done under boards of education, and in some places, it is said, by inadequately educated technicians.

**Back to States' Rights!**—A call for release from Federal interference in local affairs and for relief from Federal taxes that amount to five times those that the States collect. Physicians who care to interest themselves in the ever-broadening field of governmental interference in private business, and who are opposed to State medicine as they are opposed to governmental operation of other businesses are invited to read an article under the above title by Governor Ritchie of Maryland, in the March number of *World's Work*. Governor Ritchie shows that the enormous Federal taxes we now pay are only in their infancy if Federal subsidies to States for this or that purpose are continued. Legislation of this character is before Congress now.

**San Diego Has Eleven New Sheppard-Towner Health Centers**—A Sheppard-Towner nurse of San Diego reports the establishment of eleven new health centers. According to local reports, "San Diego county is one of the five very fortunate counties in California to have a Sheppard-Towner nurse, whose work is that of general health supervision of children during the impressionable pre-school age covering the period from birth to six years, inclusive."

**Wheat Valorization of Medical Fees**—"In view of the fluctuation of the Hungarian currency, the medical profession has been obliged to raise fees almost from week to week," according to the Budapest correspondent of the *Journal of the American Medical Association*. "Although the increase has never corresponded to the depreciation of the currency, and, in fact, medical fees are the only ones in Hungary which do not reach the so-called gold parity, yet the general press has commented on the raise of medical fees as inhuman and not worthy of the medical profession. Some medical journals even have had disputes with the lay press on this subject; but, judging from the correspondence addressed to the journals, it seems that the general public believes that the physician should be satisfied with only half pay for his work, the other half being taken out in love for his work. These discussions have led some branches of the National Medical Association to introduce the wheat valorization: a medical consultation is priced at the value of 5 kg. of wheat. The fees paid at present not being equivalent to 2 kg. of wheat, the increase is considerable; but, even so, it is only half of the pre-war fees, the price of a medical consultation being then at least 2 kronen (40 cents), the value of at least 10 kg. of wheat. The board of the association has stated that, in accordance with its well-known altruism, officials and private clerks are made exceptions to the rule, and will pay according to their financial means."

**The Blood "Donor" Problem**—The frequent legal complications connected with the transfusion of blood and the "news value" so frequently attached to one phase or another of the problem warrants consideration of the whole question as of the first importance professionally, and from an economic standpoint.

Most of the economic problem centers in the rights of "donors." These people often claim about all the injuries to their health by the removal of small amounts of blood that one could bring about with an ax. Often courts sustain them in their claims. Sometimes there are unavoidable accidents, even in the hands of experienced physicians, and it does appear that occasionally an operator is incompetent.

In all such instances, it is perfectly proper that responsibility be fixed and reparation made by reasonable compensation. This is a matter easily cared for by insurance and all physicians, and hospitals should see that their policies protect them in this field. The "donor" also should be protected by special insurance provisions, in addition to any protection they may have under the industrial accident law.

It is a well-known fact that safe "blood grouping" between "donor" and patient should be made and recorded before any transfusion is given. Physicians have been convicted upon evidence of their colleagues for unfavorable results where this procedure was not adequately followed. There is no excuse in law or ethics for such carelessness, and it is doubtful if insurance protection could be secured which would protect against it. Criminal liability has been established in some cases of this kind.

**Treating the Ambulatory Sick in New York City**—The annual report of the United Hospital Fund of New York shows that the 225 "free" and "part pay" clinics of the city treated 1,250,000 citizens during the year, or about one-fifth of the entire population. The amount collected from the patients is not given, but some 3000 physicians were the only ones who rendered their services free. Basing the costs of these services upon the average costs worked out by other clinics, they cost someone at least \$2,000,000. Based also upon average statistics, at least half and probably more was paid for by the patients in small fees. Some very interesting figures are being collected here and there as to the funds being collected from patients by health centers and clinics. We will have more to say about these from time to time.

**Modesto Handles Diphtheria Immunization in a Commendable Manner**—Modesto, like other communities, has the problem of protecting its young inhabitants against the epidemic of diphtheria. J. W. Morgan, the city health officer, took charge of the educational publicity, and secured an appropriation from the city authorities to purchase the materials. He then made arrangements with the physicians of the community to give the complete immunization to all comers at the nominal charge of \$3 per patient. Citizens able to do so pay their own doctors, and those unable to pay were allowed to go to the doctor of their choice, and the city paid the \$3 to the doctor.

Many cities and other communities in Eastern States follow this method for diphtheria and other medical services, but it's rare enough to comment upon in California. Here we establish special "clinics" with all the fuss and "labeling" of the poor to render this and other simple services which all physicians are prepared to render in the offices.

**Medical Examinations by Family Physicians**—Since our articles upon the subject of who is competent to make medical diagnosis began to appear, our correspondents report from several places in California a tendency to give an educated physician's opinion precedence over scales, measuring rods, and the new ouija diagnostic board, patented by a Government bureau. In other places, the comparisons are still made between the reliability of the doctor and the ouija board or scales in distinguishing between health and disease.

In Fresno, Miss Lillian Dahlgren, nutrition specialist, emphasizes the willingness of the doctors to examine children who come to them in their offices, and they have examined many. The mechanical diagnostic devices are still maintained also, and their readings apparently interpreted and accepted without physician's examinations in many instances. We presume that physicians furnished the data for that part of the report which says: "Examination of the children has revealed that three-fourths have carious teeth, diseased tonsils and adenoids, enlarged glands of the neck, round shoulders, flat chests, anaemia or

lowered body temperature. Many have serious defects of vision and ear diseases."

**The Department of Agriculture Clinics**—The department of agriculture does not propose to be behind the Department of Labor or any of the other numerous departments at Washington, who are practicing medicine by mail. Like the others, they have the great Government printing plant at their call. They have mail-franking privileges, and their clerks are as competent to give medical advice as are those of the other political bureaus. One of their recent expensive health sermons by mail told the world that a soup of chopped creamed lettuce, spinach, and cabbage was desirable for children because it contained vitamins, and that the addition of a little onion would add flavor plus more vitamins.

Now, isn't that interesting and illuminating? It sounds like the action of another department that started out to equip all mail-delivery wagons with scales to weigh all the babies with. This policy of more medicine in government and more government in medicine is still popular—at Washington.

**San Luis Obispo Vaccination Clinic**—The clinic operated by the San Luis Obispo health board has succeeded in vaccinating 229 persons during the period of its existence. The work was performed for persons in all walks of life free. It is said that most of the citizens went to their family doctors for vaccination, and that those who were able to do so paid for the service, and that others had it for nothing.

**Schools' Responsibility for Child Welfare Repudiated**—In a recent address, Edward I. Cook, professor of social science of the Junior College of Sacramento, is quoted as having said that "there has been a tendency of late to shift more and more responsibility for school children upon the shoulders of school officials. This is unjust. Taxpayers and others who should be interested in the welfare of children pay little or no attention to them. When an occasion arises in which the children's actions are criticized, the school officials are blamed for it."

"It is up both to the college and to the citizens of the city," said the speaker, "to teach students the duties of citizenship. We must teach them, by example, the road to good citizenship, and not merely hand out a prescription by which it may be attained."

Some of these days when educational leaders, less far-seeing than Cook, realize the trouble they have invited and the dangers it is bringing to the worthy cause of education, they will be glad to shift more responsibility back to parents from whom their propaganda has wrested it. They will be glad to ask the family physician to again assume the duties and responsibilities of health advice; and possibly the movement in some States to wrest spiritual development from its traditional position may be arrested.

**The High Cost of Wasting**—Ida Clyde Clarke (editorial, Pictorial Review) calls us a nation of wasters. We waste our time and our energy and our talents and our money, and, above all, we waste our power. We have enough organizations and enough professional reformers and enough people with the instinct for reform to clean up the country generally, if we really wanted to do it. But the trouble is we are not interested in concrete reforms. We don't want to see the end. We seem to be afraid of finishing things. We like the all-day-sucker variety of reform. We will work in a frenzy of zeal for anything that is intangible and afar off. Such loose terms as "Americanism" and "welfare" are music to our ears, and we simply adore the very thought of "standardization." Many of our great "movements" sweep majestically on toward nothing. Yet in spite of this we fall into line quite readily with every new idea that is suggested.

## Medical School News

**Stanford University School of Medicine** (reported by W. Ophuls, dean)—The Medical Faculty has reorganized its schedule in such a way as to reduce the required hours to the minimum required by the laws of the State of California, which is 4000 for the instruction in the first four years in medicine. Three thousand eight hundred hours of this will be prescribed, leaving 200 hours for elective work. It is hoped that in the course of time the amount of elective work can still be further increased.

It has been pointed out frequently that, although physicians naturally should be leaders in public health movements, very little if any attempt is made to teach the students in medical schools personal hygiene and supervise their activities in such a way as to keep them in good health and physically fit. In order to overcome this just criticism, the Medical Faculty has decided to appoint a physical adviser to the medical students at the Medical School in San Francisco, who will take a personal interest in them and will encourage them to take the necessary amount of physical exercise in one form or another.

There has been a good deal of complaint in, and outside of medical schools that there is a large amount of duplication in the different courses that make up the medical curriculum. There is no question that this is one of the causes of the overburdening of the medical students with required work. In order to obtain accurate data as to the actual state of affairs, the Medical Faculty has appointed a committee on correlation of courses, who have been asked to study the situation and make a thorough report with suggestions for improvement.

**Changes in Faculties**—E. B. Towne was promoted from the rank of Assistant Professor of Surgery to the rank of Associate Professor of Surgery, and Jean Oliver was promoted from the rank of Associate Professor of Pathology to that of full Professor of Pathology, these promotions to take effect with the beginning of the new college year, on September 1.

George de F. Barnett, who has been in private practice at Palo Alto for several years, has been recalled to the Medical School as Associate Professor of Medicine. Professor Barnett will devote most of his time to our medical service at the San Francisco Hospital.

Mr. Maurice L. Tainter has been promoted from assistant in Pharmacology to instructor in Pharmacology.

**Health Insurance in Colleges**—"The idea of health insurance, bordering on the old 'lodge practice idea,' has invaded the campus at the University of California, American Medicine recently pointed out," says the Ohio State Medical Journal editorially.

"This great American university with 'no tuition fees, but certain small incidental fees,' exacts from the student a 'fee' for both the sick and the well.

"Each student is required to pay \$6 annually. This sum is the premium charged for health insurance, not 'only entitling one to examination, but to full care of his health for that period.'

"It is further shown that there are between seven thousand and eight thousand students at the university who pay the fee. It is estimated that the revenue is about \$42,000, which goes to maintain a small hospital and staff of physicians.

"It comes as a surprise that such an institution as the University of California would foster such paternalistic measures as health insurance, not alone from the immediate effect upon its students, but from the 'viewpoint' which is being developed toward relationship of the individual toward society."



# PROGRAM

THE FIFTY-THIRD ANNUAL SESSION  
OF THE CALIFORNIA MEDICAL ASSOCIATION TO BE HELD  
AT LOS ANGELES, CALIFORNIA, MAY 12, 13, 14, 15, 1924



LOS ANGELES BILTMORE  
Headquarters for Meeting of California Medical Association

## OFFICERS AND COMMITTEES, 1924

T. C. Edwards, Salinas, President.  
Granville MacGowan, Los Angeles, President-Elect.  
W. H. Strietmann, Oakland, First Vice-President.  
R. A. Cushman, Santa Ana, Second Vice-President.  
Emma W. Pope, San Francisco, Secretary.  
W. E. Musgrave, San Francisco, Editor.  
Hartley F. Peart, San Francisco, General Counsel.  
Hubert T. Morrow, Los Angeles, Assistant General Counsel.  
Mr. William H. Barry, Superintendent of Publications.

## COUNCILORS

**First District**—Paul M. Carrington, San Diego (1924)—San Diego, Riverside, Orange, San Bernardino, and Imperial Counties.  
**Second District**—William H. Klger, Los Angeles (1925)—Los Angeles, Santa Barbara, Ventura, and Kern Counties.  
**Third District**—W. M. Stover, San Luis Obispo (1926)—San Luis Obispo and Monterey Counties.  
**Fourth District**—Fred R. DeLappe, Modesto (1925)—Fresno, Kings, Tuolumne, Merced, Mariposa, Madera, Tulare, and Stanislaus Counties.  
**Fifth District**—David A. Beattie, San Jose (1926)—Santa Clara, San Mateo, San Benito, and Santa Cruz Counties.  
**Sixth District**—Walter B. Coffey, San Francisco (1926)—San Francisco County.  
**Seventh District**—Edward N. Ewer, Oakland (1926)—Alameda, Contra Costa, San Joaquin, and Calaveras Counties.  
**Eighth District**—James H. Parkinson, chairman, Sacramento (1925)—Sacramento, Amador, El Dorado, Alpine, Placer, Nevada, Yuba, Sutter, Sierra, Yolo, Butte, Plumas, Lassen, Mono, Inyo, Glenn, Colusa, Tehama, Shasta, Modoc, and Siskiyou Counties.  
**Ninth District**—James H. McLeod, Santa Rosa (1926)—Marin, Sonoma, Lake, Mendocino, Solano, Napa, Del Norte, Humboldt, and Trinity Counties.  
**Councillors-at-Large**—O. D. Hamlin, Oakland (1925); Rene Bline, San Francisco (1926); George H. Kress, Los Angeles (1926); William T. McArthur, Los Angeles (1926); Saxton T. Pope, San Francisco (1924); C. L. Curtis, Redlands (1926).

## DELEGATES AND ALTERNATES TO A. M. A.

**Delegates**—Charles D. Lockwood, Pasadena (1924); Victor G. Veckl, San Francisco (1924); C. Van Zwahlenburg, Riverside (1925); E. C. Fleischner, San Francisco (1925).  
**Alternates**—Walter V. Brem, Los Angeles (1924); Harry J. Spiro, San Francisco (1924); Albert Soland, Los Angeles (1925); Walter C. Alvarez, San Francisco (1925).

## COMMITTEES

**Committee on Scientific Program**—Emma W. Pope, chairman; Lemuel P. Adams, Oakland (1926); F. M. Pottenger, Monrovia (1927); F. F. Gundrum, Sacramento (1924); Walter V. Brem, Los Angeles (1925).  
**Committee on Arrangements**—William H. Klger, chairman; Harlan Shoemaker, W. T. McArthur.  
**Entertainment Committee**—George H. Kress, chairman; Donald J. Frick (golf), W. T. McArthur, Harlan Shoemaker.  
**Executive Committee**—Rene Bline, chairman; T. C. Edwards, Granville MacGowan, William H. Strietmann, James H. Parkinson, Emma W. Pope, W. E. Musgrave, Hartley F. Peart.  
**Auditing Committee**—Rene Bline, chairman; Saxton T. Pope.  
**Committee on Bunnell Memorial**—Emmet Rixford, chairman; Saxton T. Pope, Egerton Crispin.  
**Commercial Exhibits**—William Duffield.  
**Publicity for 1924 State Meeting**—Mr. Celestine J. Sullivan.  
**Assistant Secretaries for Convention**—Elizabeth McVeen Saphro, Belle Wood Comstock, Brett Davis, John H. Woolsey.

## GENERAL HEADQUARTERS AND MEETING HALLS

All meetings will be held in the Los Angeles Biltmore. Information and registration desks will be maintained in the Galleria.

## GENERAL OUTLINE OF THE MEETINGS

There will be three sessions on Monday, Tuesday and Wednesday, and two sessions on Thursday.  
Uniform hours for all meetings are provided for: 10 a. m. to 12:30 p. m.; 2 to 4:30 p. m., and 8 to 10 p. m.  
The time of each meeting is shown in the diagram.  
General Sessions—Two general sessions open to mem-

DIAGRAM OF MEETINGS

Sunday May 11	8-10										Council
Monday May 12	10-12:30	General Sessions									Council
	2-4:30	General Surgery	Radiology	Obstetrics	Dermatology Syphilology	Eye, Ear, Nose and Throat	Pathology	Neuropsychiatry	Anesthesiology		
	8-10	House of Delegates		Pediatrics	Urology	Orthopedics	Industrial Medicine				
Tuesday May 13	10-12:30	General Medicine									Council
	2-4:30	General Surgery	Radiology	Pediatrics	Urology	Orthopedics	Pathology	Neuropsychiatry	Anesthesiology		
	8-10		DINNER	DANCE	IN	BALLROOM					
Wednesday May 14	10-12:30	League									Council
	2-4:30	General Surgery	General Medicine	Obstetrics	Dermatology Syphilology	Eye, Ear, Nose and Throat	Pathology	Neuropsychiatry	Anesthesiology		
	8-10	House of Delegates									
Thursday May 15	10-12:30	General Sessions									Council
	2-4:30	General Medicine	Radiology	Pediatrics	Urology	Orthopedics	Industrial Medicine	Neuropsychiatry	Anesthesiology		

bers and guests will be held on Monday and Thursday mornings.

Section on Medical Economics, Education, Public Health and Hospitals—This meeting is held under the auspices of the League for the Conservation of Public Health on Wednesday morning.

The following sections will hold meetings:

Anesthesiology.  
Dermatology and Syphilology.  
Eye, Ear, Nose and Throat.  
General Medicine.  
General Surgery.  
Industrial Medicine and Surgery.  
Neuropsychiatry.  
Obstetrics and Gynecology.  
Orthopedic Surgery.  
Pathology and Bacteriology.  
Pediatrics.  
Radiology, Roentgenology and Radium Therapy.  
Technical Specialties.  
Urology.

Council Meetings

First Meeting—Sunday, May 11, at 8 p. m.  
Second Meeting—Monday, May 12, at 2 p. m.  
Third Meeting—Tuesday, May 13, at 2 p. m.  
Fourth Meeting—Wednesday, May 14, at 2 p. m.  
Fifth Meeting—Thursday, May 15, at 2 p. m.

Meetings of the Council With the Presidents and Secretaries of Constituent Societies

All members of the Council and all presidents and secretaries and assistant secretaries of constituent societies are requested to be present at a luncheon on Tuesday, May 13, at noon. Matters of great importance will be discussed.

HOUSE OF DELEGATES

Membership

Councillors—First District, Paul M. Carrington (1924); Second District, William H. Kiger (1925); Third District, W. M. Stover (1926); Fourth District, Fred R. DeLappe (1925); Fifth District, David A. Beattie (1926); Sixth District, W. B. Coffey (1926); Seventh District, Edward N. Ewer (1926); Eighth District, James H. Parkinson (1925); Ninth District, James H. McLeod (1926).

Councillors-at-Large—O. D. Hamlin (1925), Rene Bine (1926), George H. Kress (1926), William T. McArthur (1926), Saxton T. Pope (1924), C. L. Curtiss (1926).

DELEGATES

ALTERNATES

L. P. Adams	Alameda County (6)	E. H. Barbera
E. E. Brinckerhoff		F. W. Browning
W. A. Clark		R. A. Glenn
W. S. Kuder		Channing Hall
Gertrude Moore		W. E. Mitchell
George Rothganger		A. C. Smith
Percy L. Hamilton	Butte County (1)	Dan H. Moulton
Hall Vestal	Contra Costa County (1)	L. St. John Hely
Guy Manson	Fresno County (2)	Thomas F. Madden
J. R. Walker		L. R. Willson
Etta S. Lund	Glenn County (1)	T. H. Brown
Carl T. Wallace	Humboldt County (1)	E. L. Cottrell
Eugene LeBaron	Imperial County (1)	H. B. Graeser
F. A. Hamlin	Kern County (1)	F. J. Gundry
W. W. Peterson	Lassen-Plumas Counties (1)	Fred J. Davis
William H. Gilbert	Los Angeles County (25)	John D. Gillis
Charles D. Lockwood		Isaac H. Jones
H. G. McNeil		Elmer E. Kelly
Lyle G. McNeille		John G. Mackey
T. C. Myers		Percy T. Magan
E. M. Pallette		V. R. Mason
A. J. Scott, Jr.		A. W. Moore
F. A. Spelk		A. T. Newcomb
Philip H. Stephens		John P. Nuttall
Joseph K. Swindt		James F. Percy
O. I. Tower		A. R. Rogers
Packard Thurber		LeRoy B. Sherry
A. H. Zeller		C. P. Thomas
John V. Barrow		E. G. Butt
Michael Creamer		George L. Cole
Robert V. Day		A. S. Granger
George Dock		Robert B. Hill
William Duffield		James B. Luckie
Joseph M. King		Salvatore P. Monaco
Carl H. Parker		F. L. Rogers
Robert E. Ramsay		H. H. Sherk
Harlan Shoemaker		O. R. Stafford
Albert Solland		F. C. Swearingen
Williard J. Stone		R. A. Terry
Clarence G. Toland		H. P. Wilson

H. O. Howitt	Marin County (1)	C. A. DeLancey
L. K. Van Allen	Mendocino County (1)	Harper Peddicord
Frank W. Yocom	Merced County (1)	J. L. Mudd
W. R. Reeves	Monterey County (1)	J. A. Beck
H. R. Coleman	Napa County (1)	N. T. McArthur
Harry E. Zaiser	Orange County (1)	R. A. Cushman
Sidney Talbot	Placer County (1)	Harry M. Kanner
Thomas A. Card	Riverside County (1)	A. L. Bramkamp
F. F. Gundrum	Sacramento County (2)	W. A. Beattie
G. Parker Dillon		A. K. Dunlap
E. E. McKay	San Benito County (1)	T. F. Thorpe
F. H. Folkins	San Bernardino County (2)	A. T. Gage
E. J. Eytine		E. L. Tisinger
Thomas O. Burger	San Diego County (3)	M. C. Harding
Robert Pollock		L. H. Redellings
George B. Worthington		Martha Welpton
H. E. Alderson	San Francisco County (16)	C. H. Arnold
W. C. Alvarez		H. C. Coe
L. H. Briggs		Orrin S. Cook
Edmund Butler		L. A. Emge
Joseph Catton		T. H. Kelly
W. E. Chamberlain		A. S. Musante
E. C. Fleischner		P. H. Pierson
M. R. Gibbons		C. B. Pinkham
J. H. Graves		R. L. Richards
Sol Hyman		F. H. Rodenbaugh
W. J. Kerr		K. L. Schupp
A. R. Kilgore		J. A. Sperry
J. C. Neel		Harry Spiro
H. A. L. Ryfkogel		J. F. Sullivan
William E. Stevens		W. C. Voorsanger
V. G. Veckl		S. C. Way
Dewey R. Powell	San Joaquin County (2)	J. D. Dameron
Margaret Smyth		Charles R. Harry
A. H. Wilmar	San Luis Obispo County (1)	W. M. Stover
W. C. Chidister	San Mateo County (1)	W. O. Callaway
Franklin R. Nuzum	Santa Barbara County (1)	George R. Lutton
L. Boonshaft	Santa Clara County (2)	J. H. Shephard
George L. Barry		N. H. Bullock
P. T. Phillips	Santa Cruz County (1)	F. H. Koepke
Sherman T. White	Shasta County (1)	Ferdinand Stabel
Robert H. Heaney	Siskiyou County (1)	
E. A. Peterson	Solano County (1)	James W. Brownlie
H. S. Rogers	Sonoma County (1)	F. O. Pryor
E. R. McPheeters	Stanislaus County (1)	C. E. Pearson
Walter Gavey	Tehama County (1)	Frank L. Doane
Austin V. Miller	Tulare County (1)	Roy N. Fuller
Eugene H. Reid	Tuolumne County (1)	Homer D. W. Rose
F. E. Blaisdell	Ventura County (1)	C. E. Schultze
H. D. Lawhead	Yolo County (1)	W. E. Bates
	Yuba-Sutter Counties (1)	

## FIRST MEETING OF HOUSE OF DELEGATES

Music Room, Monday, May 12, at 8 p. m.

## Order of Business

1. Calling to Order.
2. Roll Call.
3. Report of President.
4. Appointment of the Reference Committee by the President.
5. Report of the Council, James H. Parkinson, chairman (presented before the General Sessions).
6. Report of the Committee on Scientific Program, Emma W. Pope, chairman.
7. Report of the Auditing Committee, Rene Blin, chairman.
8. Report of Committee on Bunnell Memorial, Emmet Rixford, chairman.
9. Report of Secretary, Emma W. Pope.

10. Report of Editor, W. E. Musgrave (presented before General Sessions).
11. Unfinished Business.
12. New Business.
13. Reading and Adoption of Minutes.

## SECOND MEETING OF HOUSE OF DELEGATES

Music Room, Wednesday, May 14, at 8 p. m.

## Order of Business

1. Calling to Order.
2. Roll Call.
3. Announcement of the Place of Meeting, 1925.
4. Election of Officers:
  - (a) Election of President-Elect.
  - (b) Election of Vice-President.
  - (c) Election of Councillors.

**First District**—Incumbent, Paul M. Carrington (1924)—San Diego, Riverside, Orange, San Bernardino, and Imperial Counties.  
**Councillor-at-Large**—Saxton T. Pope (1924).

  - (d) Election of Member on Program Committee (four years)—Incumbent, F. F. Gundrum (1924).
  - (e) Election of two Delegates to A. M. A. (four authorized)—Incumbents, Charles D. Lockwood (1924); Victor G. Veckl (1924).
  - (f) Election of two Alternates to A. M. A. (four authorized)—Incumbents, Walter V. Brem (1924); Harry J. Spiro (1924).
5. Report of Reference Committee.
6. Presentation of President.
7. Presentation of President-Elect.
8. Reading and Adoption of Minutes.

## GENERAL INFORMATION

**Assistant Secretaries**—Elizabeth McVeen Saphro, Belle Wood Comstock, Brett Davis and John H. Woolsey—can be reached through the Registration Desk whenever needed by officers of scientific sections for information or assistance with their programs or with other problems which may arise.

**Registration and Information**—The registration and information desk is located in the Galleria. All persons attending the Convention, whether members or not, are requested to register immediately on arrival. Beginning Sunday, May 11, registration secretaries will be on duty daily from 9 a. m. until 4 p. m.

**Guests and Visitors**—All guests and visitors are requested to register. All General Sessions and scientific meetings are open to visitors and guests.

**Badges**—Two kinds of badges will be issued by the registration bureau. All members of the California Medical Association will be issued the usual membership badge. A special badge will be issued to all guests and fraternal delegates who are attending the meetings upon official invitation of the Association.

**Ribbons for Delegates and Alternates**—The usual official ribbon is provided for this purpose and will be issued to all persons authorized to wear it.

**Membership Cards**—Every member in good standing in the California Medical Association has been issued an official membership card for 1924. This card may be useful in connection with railroad tickets, and all members are requested to have their cards with them.

**Suggestions and Constructive Criticism**—The officers and committees have tried to do everything possible to make the meeting a success. Suggestions and constructive criticism calculated to make future meetings more useful will be welcomed by any of the officers or by the assistant secretaries. Complaints of whatever character should be made to the Registration Desk where they will receive the attention of the assistant secretaries.

**Social Program**—The social program is in the hands of the Entertainment Committee, and is published on page 158 of this issue.

**Press Representatives**—Accredited press representatives are welcome and they will be accorded every possible courtesy.

**Publicity**—All publicity is in the hands of the Publicity Committee. It is requested that all persons having matter of "news" value report it to this committee. It is particularly requested that all "news" about any phase of the Convention be given out through the official committee and in no other way.

**Rules Regarding Papers and Discussions at the State Meeting**—Upon recommendation of the Executive Committee the following rules regarding papers have been adopted by the Council:

1. The maximum time that may be consumed by any paper is fifteen minutes, provided that not to exceed ten minutes' latitude may be allowed invited guests at the discretion of the presiding chairman.
2. Motions from the floor to extend the time of an author may not be entertained by the presiding officer.
3. The maximum time permitted any individual discussant on any paper is four minutes. This also applies to the author in closing his discussion. No discussant may speak more than once upon the same subject.
4. A copy of each and every paper presented at the State meeting must be in the hands of the chairman or



secretary of the section or in the hands of the general secretary before the paper is presented.

5. Manuscripts not accepted by the Executive Committee for publication in the Journal will be returned to the author as soon as practicable. Authors desiring to publish their paper elsewhere than in the Journal may have their manuscript returned to them upon written request to the State Secretary.

6. No paper will be accepted by the General Program Committee nor by Section Program Committees unless accompanied by a synopsis of not to exceed fifty words.

7. Papers shall not be "read by title."

8. No member may present more than one paper at any one State meeting, provided that members may present additional papers before Sections on Technical Specialties; and provided further, that a member may be a collaborator on more than one paper, if these papers are presented by different authors.

9. Failure on the part of an author to present a paper precludes acceptance of future papers from such author for a period of two years, unless the author explains to the satisfaction of the Executive Committee his inability to fulfill his obligation.

### GENERAL SESSIONS

T. C. EDWARDS, M. D., President,  
224½ Main Street, Salinas.

EMMA W. POPE, M. D., Secretary,  
1016 Balboa Building, San Francisco.

#### FIRST GENERAL MEETING

Music Room, Monday, May 12, 10 a. m.

1. *President's Annual Address*—T. C. Edwards, M. D., 224½ Main Street, Salinas.
2. *Address of President-Elect*—Granville MacGowan, M. D., Brack Shops Building, Los Angeles.
3. *Annual Report of the Council*—James H. Parkinson, M. D., Chairman, 1601 I Street, Sacramento.
4. *Report of the Editor*—W. E. Musgrave, M. D., 806 Balboa Building, San Francisco.
5. *Report of the Legal Department*—Hartley F. Peart, General Counsel, 514 Humboldt Bank Building, San Francisco.

#### SECOND GENERAL MEETING

##### Medical Economics, Education, and Hospitals.

This Section is under the auspices of *The League for the Conservation of Public Health*

DUDLEY SMITH, M. D., President,  
Oakland.

W. T. McARTHUR, M. D., Secretary,  
Los Angeles.

Open to the public as well as to all members of the State Association

Music Room, Wednesday, May 14, 10 a. m.

1. *The Increasing Importance of Medical Leadership and Public Health Education*—Dudley Smith, M. D., President League for the Conservation of Public Health.
2. *What Hospital Betterment Means to California*—W. E. Musgrave, M. D., Chairman Hospital Betterment Service Bureau.
3. *The Child Welfare Work of California Federation of Women's Clubs*—Mariana Bertola, M. D., State Chairman Division of Child Welfare.
4. *What Does the Public Want?*—William Duffield, M. D., Los Angeles.
5. *Is the State Spending Your Money for the Best Interests of the Whole People?*—Hon. C. C. Young, Lieutenant-Governor of California.

#### THIRD GENERAL MEETING

Music Room, Thursday, May 15, 10 a. m.

1. *Address by President of American Medical Association*—Ray Lyman Wilbur, M. D., Stanford University, Palo Alto.
2. *Relation of the Doctor to Expert Medical Testimony*—Judge Paul D. Burke, Los Angeles.
3. *The Relation of Laboratory to Clinical Medicine*—Paul G. Woolley, M. D., Assistant Professor of Pathology, Detroit College of Medicine and Surgery, Detroit, Michigan.
4. *Indications for Splenectomy*—Alfred Decastello, M. D., Professor and Primararzt of Medicine, University of Vienna, 30 Burggasse, Vienna.

### ANESTHESIOLOGY SECTION

R. F. HASTREITER, M. D., Chairman,  
Brockman Building, Los Angeles.

EDWIN FORREST BOYD, M. D., Secretary,  
Auditorium Building, Los Angeles.

#### MEETING

Monday, May 12, 2 p. m.

1. *Chairman's Address: The History and Progress of Anesthesia in California*—R. F. Hastreiter, M. D., Brockman Building, Los Angeles.

#### Secretary's Report.

2. *Further Studies in Nitrous Oxide Percentages*—Mary E. Botsford, M. D., 807 Francisco Street, San Francisco; Dorothy A. Wood, M. D., 1390 Seventh Avenue, San Francisco.
3. *Paravertebral or Regional Anesthesia*—Roy H. Johnson, M. D., Auditorium Building, Los Angeles; Charles E. Phillips, M. D., Pacific Mutual Building, Los Angeles.
4. *Sacral Anesthesia and Proctological Surgery*—A. J. Murrietta, M. D., Pacific Mutual Building, Los Angeles.
5. *The Antagonistic Functions of the Uterus in Relation to Regional Nerve Blocking*—H. T. Cooke, M. D., 307 South Hill Street, Los Angeles.
6. *The Manufacturer and Standardization of Nitrous Oxide Gas*—Donald E. Baxter, M. D., 910 N. Brand Street, Glendale.

*Social*—There will be a barbecue at one of the nearby Country Clubs one afternoon and evening, a banquet at the Biltmore, and a visit to the plant of Donald E. Baxter, M. D., Glendale, to witness the manufacture of nitrous oxide, ethylene oxygen and other interesting factors incident to anesthesia.

### Pacific Coast Association of Anesthetists

Joint meeting with the Section on Anesthesiology of the California Medical Association

MARY E. BOTSFORD, M. D., President,  
807 Francisco Street, San Francisco.

NEIL C. TREW, M. D., Secretary,  
2919 Waverly Avenue, Los Angeles.

#### FIRST MEETING

Tuesday, May 13, 2 p. m.

1. *Presidential Address*—Mary E. Botsford, M. D., 807 Francisco Street, San Francisco.
2. *Studies of Arrhythmias by the Electrocardiograph*—J. M. Wilson, M. D., Citizens' Savings Bank Building, Pasadena.
3. *Anesthesia for Prostatectomies*—John R. Burrows, M. D., 2238 California Street, San Francisco.
4. *Ethylene Oxygen Anesthesia—A New Apparatus for Giving Gases in Mixture*—John S. Lundy, M. D., Cobb Building, Seattle, Wash.
5. *Gas Oxygen Anesthesia in Thyroidectomies*—Mary F. Kavanagh, M. D., 701 Post Street, San Francisco.

#### SECOND MEETING

Wednesday, May 14, 2 p. m.

1. *Myocardial Insufficiency in Relation to Surgery and Anesthesia*—R. K. Barry, M. D., First National Bank Building, San Diego.
2. *Report on De-Etherization Carbon Dioxide from St. Luke's Hospital, San Francisco*—Edgar I. Leavitt, M. D., St. Luke's Hospital, San Francisco; Elizabeth B. Christiansen, M. D., 2215 Buchanan Street, San Francisco.
3. *Blood Chemistry in Nephritis and Toxemias of Pregnancy*—Edward H. McLean, M. D., Oregon City, Oregon.
4. *Psychology in Anesthesia*—Harry R. Carson, M. D., Goodrich Building, Phoenix, Ariz.
5. *Basal Metabolism Studies in Fatigue States*—Ronald Cummings, M. D., Pacific Mutual Building, Los Angeles.

### DERMATOLOGY AND SYPHILOLOGY SECTION

ANSTRUTHER DAVIDSON, M. D., Chairman,  
419 South Alvarado Street, Los Angeles.

MOSES SCHOLTZ, M. D., Secretary,  
Brockman Building, Los Angeles.

#### FIRST MEETING

Monday, May 12, 2 p. m.

1. Chairman's Address and Secretary's Report.
2. *Rice Workers' Dermatitis*—Harry E. Alderson, M. D., 240 Stockton Street, San Francisco; Aubrey Rawlins, Stanford Hospital, San Francisco.  
Description and prevalence. Industrial Accident Commission reports and experiences. Personal observations. Experimental work at Stanford. Conclusions.
3. *Carbohydrate Intolerance Associated with Eczemas*—Samuel Ayres, Jr., M. D., 2007 Orange Street, Los Angeles.  
(1) A preliminary report is presented dealing with the glucose tolerance reaction in a series of thirty-six consecutive cases of typical eczema. (2) The tests were made in two laboratories, each using the Folin-Wu colorimetric technic. (3) The fasting blood sugar values in these cases of eczema were not found to be abnormally high except in a few cases. (4) Very striking deviations from normal were found, however, at the one and two-hour periods following the administration of the test glucose solution. Of the thirty-six eczema cases, 33.3 per cent showed 200 mgs. or more of glucose per 100 cc. 2 of blood at the end of one hour in contrast with only 3.6 per cent of 300 normal controls; and 16.6 per cent of the eczema cases showed 200 mgs. or more at the end of two hours in contrast with only .3 per cent of 253 normal controls. (5) Of the thirty cases which were tested at the end of three hours, 40 per cent had not returned to a conservative estimate of normal (110 mgs.).
4. *Red Light in the Treatment of Dermatoses*—Harry P. Jacobson, M. D., Broadway Central Building, Los Angeles.
5. *The Relationship of Metabolic Toxins to Dermatoses*—Oscar Schroeter, M. D., Union Oil Building, Los Angeles.

Tuesday, May 13, 10 a. m.

Clinical Session at the Los Angeles General Hospital.

#### SECOND MEETING

Wednesday, May 14, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.
2. *Cancer of the Lip Treated by Radium*—Douglas W. Montgomery, M. D., 323 Geary Street, San Francisco; George D. Culver, M. D., 323 Geary Street, San Francisco.
3. *Ringworm of the Scalp*—Hiram E. Miller, M. D., 380 Post Street, San Francisco.
4. *Morphologic Instability of Cutaneous Lesions*—Moses Scholtz, M. D., Brockman Building, Los Angeles.  
Dynamics versus statics in dermatology. Static point of view prevailing in pathology and morphology. Static conception of clinical entity—unit of current dermatologic classification. Morphologic phenomena unexplainable under static point of view: 1. Borderline forms. 2. Polymorphism. 3. Combined lesions. 4. Freakish forms. 5. Morphologic metamorphosis. Dynamic conception of cutaneous reaction introduced by Brocq. Strong and weak features of Brocq's classification. Suggested modification of Brocq's ideas. Theoretical and practical advantages of the dynamic point of view.

### EYE, EAR, NOSE, AND THROAT SECTION

HARVARD McNAUGHT, M. D., Chairman,  
Butler Building, San Francisco.

PERCIVAL DOLMAN, M. D., Secretary,  
Flood Building, San Francisco.

#### FIRST MEETING

Monday, May 12, 2 p. m.

1. Chairman's Address: *Diagnosis and Treatment of Chronic Ethmoidal Conditions*—Harvard McNaught, M. D., Butler Building, San Francisco.  
Secretary's Report.
2. *Treatment of Lime Burn of the Eye*—Otto Barkan, M. D., 516 Sutter Street, San Francisco.
3. *Blood Staining of the Cornea*—Charles Maghy, M. D., 1136 W. Sixth Street, Los Angeles.
4. *Plastic Surgery of the Nose*. (Lantern slides)—George Warren Pierce, M. D., 870 Market Street, San Francisco.

#### SECOND MEETING

Tuesday, May 13, 10 a. m.

1. *Surgical Treatment of Acute and Chronic Conditions of the Antrum of Highmore*—Cullen F. Welty, M. D., 210 Post Street, San Francisco.
2. *The Present-Day Advance in Plastic Surgery With Special Reference to the Correction of Deformities of the Nose and About the Orbit*—J. Paul de River, M. D., United States Veterans' Bureau, San Francisco.
3. *The Importance of Accuracy in Refraction Work*—M. Morgan Cloud, M. D., Baker-Detwiler Building, Los Angeles.
4. *Allergies in Relation to Rhino-Laryngology*—George Piness, M. D., Medical Office Building, Los Angeles.

#### THIRD MEETING

Wednesday May 14, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.
2. *Testing the Cochlea Directly—With Presentation of the New Instrument for Testing Hearing*—Isaac H. Jones, M. D., 448 Arden Boulevard, Los Angeles.
3. *A New Method of Treatment for Chronic Laryngeal Stenosis*—Edward Cecil Sewall, M. D., 3515 Pacific Avenue, San Francisco.
4. *Foreign Bodies in Respiratory and Upper Digestive Tracts* (Lantern Slides)—Simon H. Jesberg, M. D., 1151 W. Sixth Street, Los Angeles.
5. *Removal of Tonsils by Electro-Coagulation*—Albert C. Carlton, M. D., 117 Post Street, San Francisco.

### GENERAL MEDICINE SECTION

A. S. GRANGER, M. D., Chairman,  
2007 Orange Street, Los Angeles.

ERNEST S. DU BRAY, M. D., Secretary,  
Flood Building, San Francisco.

#### FIRST MEETING

Tuesday, May 13, 10 a. m.

1. Chairman's Address and Secretary's Report.
2. *Disturbed Metabolism as a Background for Disease*—Lovell Langstroth, M. D., 240 Stockton Street, San Francisco.  
The relation of heredity, feeding, exercise, rest, and sun exposure to metabolic processes and the health of the individual. A broader conception of metabolism. Degenerative disease or infection as expressions of its disturbance.
3. *The Present Status of the Treatment of Diabetes with Insulin*—W. D. Sansum, M. D., Third Avenue and Bath Street, Santa Barbara; N. R. Blatherwick, Ph. D., Third Avenue and Bath Street, Santa Barbara.  
A. A brief summary of the methods used and the results obtained in a group of extremely severe patients who have had insulin for one year or longer.  
B. The glucose equivalent of the insulin rabbit unit.  
C. A review of our attempts at mouth medication, together with the results obtained.

4. *Symptoms Associated with the Use of Insulin in Diabetes*—Bernard Smith, M.D., 1032 West Eighteenth Street, Los Angeles.

1. Symptoms of insulin overdosage. 2. Symptoms appearing after periods of insulin therapy. Analysis of these complex symptoms. Comparison of these complex symptoms with those of insulin overdosage. 3. Laboratory studies of selected cases that show these complex symptoms.

5. *The Frequency of Endogenous Endocrine Obesity and Its Treatment by Organotherapy* (Illustrated by lantern slides)—H. Lissner, M.D., 240 Stockton Street, San Francisco.

It is generally thought that the vast majority of obese persons eat voraciously and exercise insufficiently, and that this obesity is exogenous. This view is probably exaggerated. Many fat people eat moderately, or even meagerly, and are normally active. Many thin individuals consume large quantities of food, and are not athletic. Slides will be shown of various types of endocrine obesity in children and adults; hypophyseal and gonadal; the hypophyseal predominate. The value of basal metabolism estimations is discussed. These patients are difficult to reduce by diet and exercise alone; reasons given; organotherapy is indicated and usually efficacious. It is not harmful, if properly controlled. Examples given.

#### SECOND MEETING

Wednesday, May 14, 2 p. m.

1. *Treatment of Intestinal Protozoan Infections with Mercurochrome 220*—George A. Gray, M.D., Twohy Building, San Jose.

Being a report on the treatment of twenty cases of infestation with *Giardia enterica*, *Chilomastix*, *Councilmania* and *Endamoeba dysenteriae* by means of Mercurochrome 220, administered by mouth. Stools have remained negative for as long as two to six months after treatment. All stool analyses were made by the State Hygienic Laboratory at Berkeley.

2. *The Clinical Data Obtained from the Study of a Series of Cases of Pernicious Anemia*—Edwin L. Bruck, M.D., 240 Stockton Street, San Francisco.

Introduction with historical data. The presence of certain constant findings in the histories and in the examination of these patients. Attempts to explain these findings by clinico-pathological and autopsy data. The futile search for definite etiology. The course of the disease. The aim of therapy. The influence of therapy. Conclusions.

3. *The Treatment of Post-Influenzal Asthma*—Samuel H. Hurwitz, M.D., 516 Sutter Street, San Francisco.

As an aftermath of the waves of influenza, which began with the great pandemic of 1918, there are now a large number of patients who are suffering from some of its sequelae. Of these we have found asthmatic bronchitis to be an extremely important sequel and one not sufficiently emphasized. During the routine treatment of over several hundred asthmatics during the past five years we became impressed with the observation that, of those instances of bacterial asthma which we were called upon to treat, two groups of cases responded better than the others. Those were the children whose asthmatic bronchitis followed upon some acute respiratory infection such as whooping cough, broncho-pneumonia, grippe, a neglected bronchitis or a tonsillitis, and secondly, those adults and children whose asthmatic paroxysms were definitely the outcome of an attack of influenza of varying severity. The role of infection and the treatment of bacterial asthma in childhood has been presented in a former communication. In this paper we wish to emphasize the value of properly prepared and carefully administered autogenous

vaccines in the post-influenzal group, and to call attention to the end-results obtained by this mode of therapy.

4. *Baumgarten's Disease*—V. R. Mason, M.D., 919 Pacific Mutual Building, Los Angeles.

(1) Report of cases which have been classified under the term "Von Baumgarten's disease." (2) Discussion of their relationship to the umbilical vein, as well as their relationship to ordinary cirrhosis of the liver. (3) Venous hums in the epigastrium which may accompany diseased conditions.

5. *Report of 300 Cases of Pulmonary Tuberculosis Treated with Partial Antigens (Much-Deycke) During the Last Three Years*. (Lantern Slides)—Max Rothschild, M.D., 350 Post Street, San Francisco.

Differentiation of partial antigens and tuberculins. Indication for treatment with partial antigens based on prevailing pathological condition and how determined.

#### THIRD MEETING

Thursday, May 15, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.

2. *Vincent's Disease and Parasyphilis*—F. F. Gundrum, M.D., Capital National Bank Building, Sacramento.

An acute contagious disease due to a specific cause. Generally local, but also producing septicemia. Widely disseminated throughout the world. Common sites of infection. Evidences of invasion. A fatal case. Skin rashes. Parasyphilis of Stern.

3. *The Treatment of Chronic Arthritis*—Leonard W. Ely, M.D., Lane Hospital, San Francisco.

In order to treat successfully the diseases of any organ, an idea at least of their pathology is necessary. Inflammation in the joints forms no exception to this rule. Its treatment is comparatively simple in most instances. Sketch of the various forms of arthritis, and the treatment of each.

4. *Changes in Heart Area as the Result of Decompensation and Compensation—With Report of Twenty Cases*—Donald Jackson Frick, M.D., 1136 West Sixth Street, Los Angeles.

This report was prompted by lack of accurate data on changes of heart outline. Brief review of method of obtaining cardiac areas by use of orthodiagrams. Discussion of findings in twenty cases of decompensation. Tables showing lesions, etiology factors, electrocardiographic findings and heart areas. Brief review of four of the more interesting cases, with lantern slides demonstrating change in cardiac outline. Conclusions.

5. *Coronary Obstruction*—James F. Churchill, M.D., Timken Building, San Diego.

Acute coronary obstruction one of the grave cardiac accidents, though not necessarily fatal. Anatomy of the coronary vessels. Discussions of variations in the clinical picture. Report of cases. Remarks on a differential diagnosis, prognosis and treatment.

6. *Heart Pain*—Thomas H. Kelly, M.D., 240 Stockton Street, San Francisco.

The origin of heart pain is an exhausted heart muscle. Its location, character and occurrence are variable. Its occurrence is brought about usually through heart strain, and the factors influencing its origin and occurrence are discussed. The prognosis must be guarded, and treatment is directed toward providing all possible cardiac rest compatible with an endurable existence. Examples are cited showing varieties of causes at work, and the results of treatment.



## GENERAL SURGERY SECTION

REA SMITH, M. D., Chairman,  
Medical Office Building, Los Angeles.

LEO ELOESSER, M. D., Secretary,  
Butler Building, San Francisco.

## FIRST MEETING

Monday, May 12, 2 p. m.

- Chairman's Address and Secretary's Report.
- Cautery Knife Excision of the Malignant Uterus. (Technique and Results)*—James F. Percy, M. D., 1030 South Alvarado Street, Los Angeles.  
This paper urges the substitution of the cautery knife for the usual sharp dissection in the removal of the uterus and adnexa. The former neither encourages the dissemination of the disease into uninvaded areas nor stimulates it into new virulence.
- Doubtful Tumors: Shall We Cut Out a Piece for Diagnosis?*—A. R. Kilgore, M. D., 391 Sutter Street, San Francisco.  
(1) In experimental animals—influence of trauma and of surgical section on metastasis of tumors.  
(2) Clinical evidence. (a) Necessity of particularizing with reference to organ or tissue from which tumor arises. (b) Effect on statistics of cures of failure to recognize different degrees of malignancy in tumors arising from the same tissue. (3) Safe procedures in cancers of: (a) Lip; (b) Mouth; (c) Skin; (d) Breast; (e) Cervix; (f) Fundus of uterus.
- Some Unusual Bone Cases (With Lantern Slides)*—W. W. Richardson, M. D., Brockman Building, Los Angeles.  
Acute non-suppurative osteomyelitis with sequestration. Report of two cases, onset, course, X-ray appearance as in the ordinary suppurative type.
- Factors Influencing Morbidity and Mortality of Exophthalmic Goiter*—John Hunt Shephard, M. D., Growers' Bank Building, San Jose.  
(1) Present statistics: Types and severity of thyroid intoxication not segregated in present statistics. (2) Early diagnosis: Diagnosis possible before classical text-book picture develops. (3) Pre-operative care: Evaluation of patient's cardiac and nervous reserve. Establishment of water balance; use of iodine. (4) Operative Procedure: Selection of cases for multiple-stage operation. (5) Post-operative care: Cure not immediate. Supervision of post-operative life.
- Importance of Differential Leucocyte Count in Inflammatory Conditions*—Newton Evans, M. D., Loma Linda; Phillips J. Tunnell, M. D., Loma Linda.  
Meaning of increase of leucocytes—indicator of degree of reaction against infection. Increase of polymorphonuclears—indicator of severity of infection. Differential count of greater importance than total count. Danger of misinterpreting absence of leucocytosis in severe infections. Relation of polynucleosis to suppuration. Report of cases. Walker's Index of Resistance. Exceptions.

## SECOND MEETING

Tuesday, May 13, 2 p. m.

## Symposium on Chronic Gall-bladder Disease

- Treatment of Chronic Cholecystitis*—W. W. Boardman, M. D., 350 Post Street, San Francisco; G. D. Schoonmaker, M. D., 350 Post Street, San Francisco.  
Frequency of the occurrence; often unrecognized as the cause of chronic gastro-intestinal; nervous and other symptoms. General confusion regarding the methods of treatment; prophylactic measures; diet; drugs; Lyon Meltzer method, with results in a series of cases. What cases are surgical?
- Conservative Treatment of Gall-bladder Conditions*—H. P. Hill, M. D., 177 Post Street, San Francisco; R. V. Lee, M. D., 177 Post Street, San Francisco.
- Obstruction of the Cystic Duct and Its Surgical Consequences (Lantern Slides)*—A. S. Lobingier, M. D., Merritt Building, Los Angeles.

- Surgical Aspects of Gall-bladder Diseases*—Guy Cochran, M. D., Pacific Electric Building, Los Angeles.
- Gall-bladder Diseases from a Surgical Standpoint*—J. J. Van Kaathoven, M. D., 1136 West Sixth Street, Los Angeles.  
Discussion opened by Rea Smith, M. D., Medical Office Building, Los Angeles; A. W. Lobingier, M. D., Merritt Building, Los Angeles.
- Acute Pancreatitis (With Report of Four Cases)*—C. G. Toland, M. D., Pacific Mutual Building, Los Angeles.

A brief description of acute pancreatitis and its characteristic differentiating symptoms, followed by a report of four cases.

## THIRD MEETING

Wednesday, May 14, 2 p. m.

- Election of Section Officers and Transaction of Other Section Business.
- Unusual Conditions in the Duodenum and Their Significance*—Gunther W. Nagel, M. D., Mayo Clinic, Rochester, Minn.  
Congenital stenosis in adult, with case history. Duodenal diverticula (acquired). Carcinoma of duodenum: difficulty of diagnosis, and poor prognosis.
- Esophageal Diverticula. (Lantern Slides)*—E. C. Moore, M. D., Merchants National Bank Building, Los Angeles.  
Anatomy of the esophagus. Etiology: Inflammatory lesion. Congenital nature. Symptoms: Signs of throat irritation. Difficult swallowing. Changes in physical condition. Diagnosis: Characteristic history. X-ray findings. Esophagoscopy. Classifications: Pulsion. Traction. Severity, depending on size and location. Treatment: Traction: Medical treatment. Pulsion: Surgery, types of operation, after care. Case histories. Illustrated by slides.
- Diverticulitis of the Large Intestine*—Maurice Kahn, M. D., Brockman Building, Los Angeles.
- Surgical Treatment of the Diseases of the Colon*—Charles E. Phillips, M. D., Pacific Mutual Building, Los Angeles.  
Rest and cleanliness are the first essentials to insure success in the treatment of diseases of the colon. A simple cecostomy at the margin of the ileo-cecal valve completely sidetracks the large bowel as the valve presents through the wound. The operation, care, and closure of the same is a simple matter.
- Cancer of the Rectum*—M. S. Woolf, M. D., 240 Stockton Street, San Francisco.  
Stagnation of bowel contents as a factor in intestinal cancer. Analysis of cases of cancer of the rectum in the University of California Hospital according to age, signs, and symptoms. Significance of pain, constipation, and bleeding in diagnosis. Duration and position of the growth. Mode of spread. Earliest appreciable warning of the disease. Treatment.

## INDUSTRIAL MEDICINE AND SURGERY SECTION

ROSS W. HARBAUGH, M. D., Chairman,  
350 Post Street, San Francisco.

W. C. ADAMS, M. D., Secretary,  
Medical Arts Building, Oakland.

## FIRST MEETING

Monday, May 12, 8 p. m.

- Chairman's Address and Secretary's Report.
- Lengthening the Quadriceps Tendon for Stiff Knee*—George J. McChesney, M. D., 870 Market Street, San Francisco.
- Fracture of the Surgical Neck of the Humerus (Lantern Slide Demonstrations)*—Emmet Rixford, M. D., 1795 California Street, San Francisco.
- Previous Pathology Modifying Results in Industrial Skeletal Injuries*—S. J. Hunkin, M. D., 1155 Bush Street, San Francisco.

## SECOND MEETING

Tuesday, May 13, 10 a. m.

*Open Meeting* for the consideration and discussion of industrial medicine questions.

## THIRD MEETING

Thursday, May 15, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.
2. *Relation of Head and Back Trauma to Traumatic Neurosis*—Gilbert M. Barrett, M. D., 2740 Lake Street, San Francisco.
3. *The Industrial Aspects of Abdominal Conditions*—Edwin I. Bartlett, M. D., 240 Stockton Street, San Francisco.
4. *When Is a Hernia?*—Phillip H. Stephens, M. D., Pacific Electric Building, Los Angeles.

## NEUROPSYCHIATRY SECTION

C. L. TRANTER, M. D., Chairman,  
209 Post Street, San Francisco.

GLENN E. MYERS, M. D., Secretary,  
Marsh-Strong Building, Los Angeles.

## FIRST MEETING

Monday, May 12, 2 p. m.

## Symposium on Child Guidance

1. *Reasons for Child Guidance Clinics*—Robert Lewis Richards, M. D., 240 Stockton Street, San Francisco.  
(1) Lessons learned from many surveys in many places. (2) Modifiable elements in the personality problems. (3) Stages and stresses in mental growth and lessons therefrom. (4) Is a Child Guidance Clinic a duplication of existing work? What are its relation to other medical sociological or educational work in general.
2. *Mental Health of Children—A National Asset*—V. V. Anderson, M. D., Director Division of Prevention of Delinquency of the National Committee for Mental Hygiene, New York City.
3. *The Habit Clinic for Pre-School Children*—Sydney Kinnear Smith, M. D., Medical Building, Oakland.  
(1) A brief review of the development of mental hygiene as applied to the problems of childhood. The appearance of the habit clinic idea in this country, with special reference to the recent work in the State of Massachusetts. (2) A general survey of the scope of a habit clinic with resumé of typical cases, leading to a discussion of the role of faulty habits in childhood as in influencing adult adaption and mental health. (3) The organization and technique of a habit clinic, and a description of methods of re-education employed.
4. *Adult Delinquency: Its Prevention by Mental Hygiene in Childhood*—Joseph Catton, M. D., 209 Post Street, San Francisco.  
Consideration of cases. The role of childhood mental hygiene in (a) dealing with hereditary factors, (b) prevention of disease and accident or caring for them when they occur, and (c) guidance of intellectual, emotional, moral, religious and social development—all these toward the prevention of later criminality or other evidence of maladjustment.
5. *The Problem Case*—Richard W. Harvey, M. D., 380 Post Street, San Francisco.  
Definition of the term. Causative factors in the development of problem cases. Relation of problem cases to vocational training. Social aspects of problem cases. Results attained in rehabilitating veterans. Results attained in handling private cases. Relation of clinics and training centers to problem cases.
6. *Experience in Los Angeles in Child Guidance Work*—Aaron J. Rosanoff, M. D., 2007 Orange Street, Los Angeles.  
Negotiations with the National Committee for Mental Hygiene to secure for one year a demonstra-

tion Child Guidance Clinic for Los Angeles. Requirements of the National Committee. Creation of the Menal Hygiene Organization of Los Angeles County. Plans for meeting the requirements of the National Committee. Clinic staff. Volunteer staff. Co-operation of social agencies. Type of cases selected. Clinic procedure. Co-operation of social agencies. First three months' work of the Child Guidance Clinic.

Discussion on all of the above papers opened by Ray Lyman Wilbur, M. D., Stanford University, Palo Alto; William Palmer Lucas, M. D., University California Hospital, San Francisco; Robert Langley Porter, M. D., 380 Post Street, San Francisco.

## SECOND MEETING

Tuesday, May 13, 2 p. m.

1. Chairman's Address: *The Surgery of the Sympathetic System*—Charles L. Tranter, M. D., 209 Post Street, San Francisco.

Secretary's Report.

2. *Osteomyelitis of the Skull*—Howard W. Fleming, M. D., 291 Geary Street, San Francisco.

Brief review of the literature and reported cases. Summary and outline of cases under personal observation. Etiological factors. Symptomatology and clinical course. Complications. Treatment. Prognosis. Conclusions.

Discussion opened by Edward B. Towne, M. D., Stanford University Hospital, San Francisco; Carl W. Rand, M. D., 870 Market Street, San Francisco.

3. *The Value of Cerebral Pneumograms in the Localization of Tumors of the Brain*—Edward B. Towne, M. D., Stanford University Hospital, San Francisco.

A certain proportion of tumors of the brain cannot be definitely localized, especially those lying in the frontal and temporal lobes. Palliative decompression may stop headaches and save vision, but frequently allows a benign tumor to grow beyond the operative stage. Roentgenograms of air-filled ventricles show a deformity caused by encroachment of the tumor; thus allowing exposure of operable tumors, and preventing useless extensive explorations for inoperable tumors. Case reports and lantern-slide demonstration.

Discussion opened by Thomas G. Inman, M. D., 870 Market Street, San Francisco; Carl W. Rand, M. D., 870 Market Street, San Francisco; Howard C. Naffziger, M. D., 291 Geary Street, San Francisco.

4. *The Cerebral Subarachnoid Space and Its Importance in Surgery and Medicine*—Charles E. Locke Jr., M. D., University California Hospital, San Francisco; Howard C. Naffziger, M. D., 291 Geary Street, San Francisco.

The arachnoid membrane in neurosurgical problems is as important as is the peritoneum in abdominal surgical conditions. It is not only concerned with both acute and chronic infections, but from it also certain tumors take their origin. We are fortunate in that the fluid contained in the subarachnoid space, that is, the cerebrospinal fluid, is easily available for study, thus shedding light indirectly upon the condition of the arachnoid membrane. Because little has been written concerning the arachnoid membrane and the subarachnoid space, very few of us have an accurate conception as to its extent. In hopes of clarifying this obscure conception, we have made celloidin casts of the cerebral subarachnoid spaces and ventricles, photographs and drawings of which will be thrown upon the screen. A thorough knowledge of the subarachnoid space is of utmost importance in the localization of an extra-ventricular obstruction in hydrocephalus. It is also of importance in the understanding of clinical signs associated with acute and chronic forms of meningitis. Never, however, has our ignorance of the subarachnoid space been more in evidence than when we commenced two or three years ago to at-

tempt interpretations of cerebrograms and ventriculograms.

Discussion opened by Milton B. Lennon, M.D., 380 Post Street, San Francisco; Carl W. Rand, M.D., 870 Market Street, San Francisco; Edward B. Towne, M.D., Stanford University Hospital, San Francisco.

5. *Complications Following Brain Injuries*—Carl W. Rand, M.D., 870 Market Street, San Francisco.

Cases of skull fracture associated with intracranial hemorrhage, hemiplegia, hemianopsia, aphasia, brain abscess, meningitis, or epilepsy. Lantern slides.

Discussion opened by Edward B. Towne, M.D., Stanford University Hospital, San Francisco; Howard C. Naffziger, M.D., 291 Geary Street, San Francisco; Samuel D. Ingham, M.D., 1920 Orange Street, Los Angeles.

6. *Further Points in the Physiology of Brain Surgery*—Cecil E. Reynolds, M.D., 1965 Cheremoya Avenue, Hollywood.

(1) Various methods of approach to the cranial contents. (2) Physiologically necessary exceptions to mechanical ideals. (3) Effects of negative pressure. (4) Examples in cases of extradural hemorrhage, subarachnoid hemorrhage and arachnoid cysts. (5) Essential difference in the symptoms and results of extradural and intradural hemorrhage. Differential diagnosis and complications in each case. (6) Effect of combined dural adhesions and brain shrinkage in old age. (7) Comparison of the wet and dry operations upon the brain and cord. Explanation of the Victor Horsley technique.

THIRD MEETING

Wednesday, May 14, 2 p. m.

1. *Serous Meningitis and Arachnitis*—Edward W. Twitchell, M.D., 909 Hyde Street, San Francisco.

Early work of Quincke. Case reports of Placzek, Oppenheim, Unger, Spiller, and others. Recent work of Claude. Conception of pathology and pathogenesis. Personal observations of cases of meningismus relieved by spinal drainage. Report of case of arachnitis circumscripta relieved by operation.

Discussion opened by Thomas G. Inman, M.D., 870 Market Street, San Francisco; Howard W. Fleming, M.D., 291 Geary Street, San Francisco.

2. *Radiographs of the Head in Childhood from the Clinical Standpoint*—Henry Douglas Eaton, M.D., 1136 West Sixth Street, Los Angeles.

A study of 250 radiographs of the head in children, with an attempt to correlate the X-ray findings with the clinical picture.

Discussion opened by Rolla G. Karshner, M.D., 1136 West Sixth Street, Los Angeles.

3. *The Progression Reflex: Its Manifestation and Value in Diseases of the Central Nervous System*—Isadore Leon Meyers, M.D., Brockman Bldg., Los Angeles.

The Flexion Reflex of the Spinal Animal. The Reflex of Defense. Reflex "Stepping." The Flexion Reflex in Man. The Progression Reflex as observed by the author. Its Relationship to the Babinski Toe Response. Its Diagnostic Value.

*The Reflex Nervous Disorders as Described by Babinski*—A. R. Timme, M.D., Brockman Building, Los Angeles.

(1) History: First described by Hunter, Charcot, and Vulpian. Confused with muscular atrophy, secondary to arthritic conditions. (2) Speculations as to Pathogenesis. (3) Symptomatology: Contractures and paralyzes. Vasomotor changes. Changes in muscular excitability. Changes in electrical excitability. Changes in tonus. Changes in reflexes. Changes in sensation. (4) Differential diagnosis. (5) Prognosis and treatment. (6) Presentation of case.

Discussion opened by S. D. Ingham, M.D., 1920 Orange Street, Los Angeles.

5. *Consideration of Progressive Muscular Dystrophy with Pseudo-hypertrophy from an Endocrine Standpoint.* (Illustrated by short motion picture and lantern

slides)—Clifford A. Wright, M.D., Auditorium Building, Los Angeles.

Introductory discussion; classification of cases; hereditary and familial tendencies; usual progress of disease; general symptomatology; endocrine symptoms; X-ray findings; case histories; endocrine treatment; orthopedic treatment; results in cases treated.

6. *Observations on the Treatment of Lethargic Encephalitis*—Julian M. Wolfsohn, M.D., 177 Post Street, San Francisco.

Report based on seventy cases treated by various methods. 1. Definition. 2. Anatomical classification, while inadequate, gives a working basis for diagnosis and treatment. 3. Clinical types of cases treated, with examples. 4. Treatment: (1) Internal medications; (2) Hypodermic medicaments; (3) Serum treatment; (4) Intraspinal autoserotherapy; (5) Combined serum and intraspinal autoserotherapy. 5. Conclusions.

Discussion opened by Ross Moore, M.D., 520 West Seventh Street, Los Angeles; Albert H. Rowe, M.D., 119 Thirteenth Street, Oakland.

FOURTH MEETING

Thursday, May 15, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.

2. *The Inferiority Complex and Its Psychiatric Significance*—Harold W. Wright M.D., 870 Market Street, San Francisco.

This complex considered as always acquired, even when associated with a constitutional inferiority. The far-reaching and lasting effects of childhood impressions obtained from the psychological environment are the real causes of this complex. Therefore, it is a preventable disorder. Its effects are of great importance in respect to the developments of psychoneuroses and psychoses, inefficiency, and friction, maladjustment and failure in the social, industrial, and spiritual life. Some of the psychoses are considered as symptomatic expressions of this complex which has been for years causing a psychoneurosis. Even in psychoses of toxic and organic causation, the symptomatology is dependent in part upon the previous psychological make-up and colored thereby. The importance of psychiatric knowledge and methods of approach in relation to preventive pediatrics.

Discussion opened by A. J. Rosanoff, M.D., 2007 Orange Street, Los Angeles; V. H. Podstata, M.D., Livermore; Ross Moore, M.D., 520 West Seventh Street, Los Angeles.

3. *The Psycho-neuroses: Psychastenia, Neurasthenia, Hysteria, Ambulatory Automatism, with Special Reference to a Certain Method of Treatment*—Thomas J. Orbison, M.D., 2007 Orange Street, Los Angeles.

My paper will be based upon 300 cases that have been under my personal observation and of which I have case histories. The method of treatment, which I shall discuss, I have called the "Training Camp Method."

Discussion opened by Henry D. Eaton, M.D., 1136 West Sixth Street, Los Angeles; V. H. Podstata, M.D., Livermore.

4. *Affectivity: Its Importance in Practical Medicine*—Charles Louis Allen, M.D., Los Angeles Railway Building, Los Angeles.

Definition of affectivity. Psycho-physiology. Its influence in disease processes and on symptoms both mental and physical. Evaluation of this factor and the diagnostic, prognostic and therapeutic indications which may be drawn from so doing.

Discussion opened by Edward A. Franklin, M.D., Bank of Italy Building, Los Angeles.

5. *Treatment of Morbid Fear*—Samuel D. Ingham, M.D., 1920 Orange Street, Los Angeles.

Introduction: Covering a general discussion of the problems relating to the disturbances of fear instinct and the consideration of the position occupied by fear in neuro-biology. (1) Morbid fears and the



mechanism of their production. (2) The differentiation of morbid fears as compared to normal fears. (3) The biologic value of the fear instinct, and the destructive effect of excessive fear reactions. (4) The character of morbid fears compared to tissue allergies; sensitization and desensitization. (5) The treatment of morbid fears: Analysis of individual case. Educating the patient. Desensitization.

Discussion opened by Nathaniel H. Brush, M.D., San Marcos Building, Santa Barbara; Robert Lewis Richards, M.D., 240 Stockton Street, San Francisco.

6. *Some Fears of Endocrine Origin*—Edward Huntington Williams, M.D., Pacific Mutual Building, Los Angeles.

General discussion of the subject, with some practical illustrations. Suggestions for treatment.

Discussion opened by Ernest B. Hoag, M.D., 325 Oak Lawn, Pasadena; George G. Hunter, M.D., Pacific Mutual Building, Los Angeles.

7. *The Practitioner and the Diagnosis of General Paresis*—Nathaniel H. Brush, M.D., San Marcos Building, Santa Barbara.

General paresis can simulate any known mental disorder. The earliest symptoms of paresis may be entirely somatic, and the patient's first complaint may have no reference to the central nervous system. The text-books give excellent descriptions of the standard paretic, but it is the paretic who is not standardized that causes the difficulty. Not all paretics show Argyll-Robertson pupils, the reflexes are often exaggerated in the various neuroses, and often all that the patient shows is the so-called neurasthenic reaction. The practitioner should be on his guard in the presence of any slight physical abnormalities coupled with the history of a slight memory failure, and a mental and moral delapidation. He should search further for other difficulties, and above all a thorough serological examination is indicated.

Discussion opened by S. D. Ingham, M.D., 1920 Orange Street, Los Angeles; V. H. Podstata, M.D., Livermore.

## OBSTETRICS AND GYNECOLOGY SECTION

A. B. SPALDING, M.D., Chairman,  
Stanford University Hospital, San Francisco.

PETER O. SUNDIN, M.D., Secretary,  
H. W. Hellman Building, Los Angeles.

### FIRST MEETING

Monday, May 12, 2 p. m.

#### Symposium on Carcinoma of the Uterus

1. Chairman's Address: *Mortality Rates of Carcinoma of the Uterus in California*—A. B. Spalding, M.D., Stanford University Hospital, San Francisco.

Secretary's Report.

2. *Recent Advances in Cancer Research*—Ludwig A. Emge, M.D., Stanford University Hospital, San Francisco.

In this review it is attempted to correlate in a concise and comprehensive form, the various lines of cancer research, including the questions on inheritability, irritability, serum diagnosis, and treatments not radiological in nature.

3. *The Prevention of Carcinoma of the Uterus*—Roland E. Skeel, M.D., Westlake Professional Building, Los Angeles.

Discussion opened by Frank R. Girard, M.D., 870 Market Street, San Francisco.

4. *Treatment of Early Carcinoma of the Uterus*—John W. Sherrick, M.D., 350 Twenty-ninth Street, Oakland.

Discussion opened by William H. Gilbert, M.D., Brockman Building, Los Angeles.

5. *Treatment of Inoperable Carcinoma of the Uterus*—Albert Soiland, M.D., 1407 South Hope Street, Los Angeles.

Reviews briefly history of radiation treatment alone, and in conjunction with surgery in uterine cancer. Discusses problems connected with the work.

Ventures the opinion that, with modern refinement of treatment technique compatible with observed immediate effects, radiation offers perhaps better curative figures than those named by conservative surgeons.

Discussion opened by A. J. Lartigau, M.D., 391 Sutter Street, San Francisco.

### SECOND MEETING

Wednesday, May 14, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.

#### Symposium on Caesarean Section

2. *Are the Present Indications for Caesarean Section Justifiable?*—Lyle McNeile, M.D., Pacific Mutual Building, Los Angeles.

Discussion opened by H. A. Stephenson, M.D., 516 Sutter Street, San Francisco.

3. *Caesarean Section for Haemorrhages*—Reginald Knight Smith, M.D., 391 Sutter Street, San Francisco.

Discussion opened by Karl Schaupp, M.D., 516 Sutter Street, San Francisco.

4. *Caesarean Section for Toxemia of Pregnancy*—E. M. Lazard, M.D., 2007 Orange Street, Los Angeles.

Toxemias of pregnancy essentially medical complication. Two general clinical classes of toxemias: first, those not improving or getting progressively worse under treatment; second, those which come under observation, profoundly toxic or eclamptic. Interruption of pregnancy indicated in those cases not improved or getting progressively worse under treatment. Method of termination of pregnancy dependent on obstetric conditions present. Caesarean section indicated when advisable to terminate pregnancy in primiparae with rigid cervixes undilated os, where pelvic measurements are small. Rational treatment of toxemias, medical; with surgical termination of pregnancy or labor, a necessary help in a limited class of cases.

Discussion opened by Adelaide Brown, M.D., 909 Hyde Street, San Francisco.

5. *Caesarean Section for Pelvic Obstruction*—Alice F. Maxwell, M.D., 1701 Bush Street, San Francisco; Frank Lynch, M.D., University of California Hospital, San Francisco.

Discussion opened by Titian Coffey, M.D., 1136 West Sixth Street, Los Angeles.

## ORTHOPEDIC SURGERY SECTION

H. H. MARKEL, M.D., Chairman,  
380 Post Street, San Francisco.

JOHN C. WILSON, M.D., Secretary,  
Medical Office Building, Los Angeles.

### FIRST MEETING

Monday, May 12, 8 p. m.

1. Chairman's Address and Secretary's Report.

#### Symposium on Chronic Back Pain

2. *The Neurological Aspect of Low-back and Sciatic Pain*—Milton Lennon, M.D., 380 Post Street, San Francisco.

3. *Gynecological Conditions as a Cause of Backache and Sciatica*—Frank W. Lynch, M.D., University California Hospital, San Francisco.

4. *The Prostate and Its Influence on Low-back Pain*—L. P. Player, M.D., 516 Sutter Street, San Francisco.

5. *Focal Infection as Related to Chronic Back Pain*—Herold P. Hare, M.D., Westlake Professional Building, Los Angeles.

6. *Anomalies and Abnormalities of the Lumbo-Sacral Spine as Etiological Factors in Chronic Back Pain.* (Lantern slides)—William B. Bowman, M.D., Brockman Building, Los Angeles.

7. *Chronic Back Pain from a Mechanical Viewpoint*—John Dunlop, M.D., Pacific Mutual Building, Los Angeles.

Discussion opened by Walter I. Baldwin, M.D., 380 Post Street, San Francisco; C. L. Lowman, M.D., Brockman Building, Los Angeles.

## SECOND MEETING

Tuesday, May 13, 2 p. m.

1. *Treatment of the Helpless Arthritic Patient*—Harry Leslie Langnecker, M.D., Stanford University Hospital, San Francisco.  
Discussion opened by C. L. Lowman, M.D., Brockman Building, Los Angeles.
2. *Early Rachitic Changes in the Femur and Tibia*—H. W. Chappel, M.D., 134 South Morton Avenue, Los Angeles.  
Discussion opened by George J. McChesney, M.D., 380 Post Street, San Francisco.
3. *The Treatment of Hip Flexion Contracture of the Hip*—Steele F. Stewart, M.D., Union Bank Building, Los Angeles.  
Discussion opened by Lionel D. Prince, M.D., 870 Market Street, San Francisco.
4. *Arthroplasty of the Elbow* (lantern slides)—William R. MacAusland, M.D., 240 Newbury Street, Boston Mass.  
Discussion opened by Walter I. Baldwin, M.D., 380 Post Street, San Francisco; C. L. Lowman, M.D., Brockman Building, Los Angeles.
5. *Metatarso-Phalangeal Osteochondritis* (Koehler's disease)—A. Gottlieb, M.D., Consolidated Realty Building, Los Angeles.  
Discussion opened by Edward C. Bull, M.D., 291 Geary Street, San Francisco.
6. *Delayed Ossification of the Tarsus in Congenital Club-foot* (lantern slides)—Edward N. Reed, M.D., 824 Eighth Street, Los Angeles.  
Discussion opened by Trusten M. Hart, M.D., Brockman Building, Los Angeles.

## THIRD MEETING

Thursday, May 15, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.
2. *The Operative Treatment of Abnormalities of the Fifth Lumbar Vertebra* (lantern slides)—Alfred E. Gallant, M.D., Van Nuys Building, Los Angeles; Walter C. Koebig, M.D., Story Building, Los Angeles.
3. *Traumatic Fractures of the Articular Processes of the Fifth Lumbar Vertebra*—Thomas A. Stoddard, M.D., 291 Geary Street, San Francisco.
4. *Ambulatory Cases of Fractures of the Spine*—H. W. Spiers, M.D., 2007 Orange Street, Los Angeles.  
Discussion opened by W. W. Richardson, M.D., Brockman Building, Los Angeles; E. W. Cleary, M.D., 177 Post Street, San Francisco.
5. *The Correction of Flexion and Abduction Deformity of the Lower Extremities Resulting from Infantile Cerebral Palsy* (moving pictures)—Richard H. Pyles, M.D., 2417 South Hope Street, Los Angeles.  
Discussion opened by Harry Schott, M.D., Brockman Building, Los Angeles.

## PATHOLOGY AND BACTERIOLOGY SECTION

GLANVILLE Y. RUSK, M.D., Chairman,  
University of California Hospital, San Francisco.ROY W. HAMMACK, M.D., Secretary,  
Pacific Mutual Building, Los Angeles.

## FIRST MEETING

Monday, May 12, 2 p. m.

1. Chairman's Address and Secretary's Report.
2. *Clinical and Pathological Studies of Coronary Sclerosis and Myocardial Degenerations*—William J. Kerr, M.D., University California Hospital, San Francisco.
3. *Werdnig-Hoffman Progressive Muscular Atrophy*—C. E. Nixon, M.D., 870 Market Street, San Francisco.
4. *The Status of the Clinical Pathologist*—Robert A. Kilduffe, M.D., Hollingsworth Building, Los Angeles.
5. *A Plea for a Standardized Technique for the Wassermann Test*—E. H. Ruediger, M.D., Angeles Hospital, Los Angeles.
6. *Results of Treatment of Cerebro-spinal Lues by the Mehrtens Method*—H. R. Oliver, M.D., 870 Market Street, San Francisco.

## SECOND MEETING

Tuesday, May 13, 2 p. m.

1. *Lymphosarcoma*. Presentation of a Case—H. S. Wisman, M.D., University California Hospital, San Francisco; W. D. Faulkner, M.D., University California Hospital, San Francisco.
2. *A Study of Primary Carcinoma of the Lungs*—Victor S. Randolph, M.D., San Francisco Hospital, San Francisco.
3. *Chronic Granuloma of Unknown Etiology Developing Endothelioma*—Harold Brunn, M.D., 350 Post Street, San Francisco.
4. *Adenomyomata of the Uterosacral Region*—J. Craig Neel, M.D., 516 Sutter Street, San Francisco.
5. *A Study of a Series of Brain Tumors*—G. D. Maner, M.D., 1100 Mission Road, Los Angeles.

## THIRD MEETING

Wednesday, May 14, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.
2. *Further Studies With Germanium Dioxide*—W. T. Cummins, M.D., Southern Pacific Hospital, San Francisco.
3. *Uremic Casts*—T. A. Addis, M.D., Lane Hospital, San Francisco.
4. *The Quantitative Amount of Lipoid Material in the Kidneys and Its Relation to the Functional Response in the Experimental Nephritis*—F. R. Nuzum, M.D., Cottage Hospital, Santa Barbara.
5. *Tuberculosis of the Tongue*—Howard Morrow, M.D., 380 Post Street, San Francisco.
6. *Pulmonary Spirochetosis*—C. E. Smith, M.D., University of California Hospital, San Francisco.
7. *Spirochetal Dysentery*—Leroy H. Briggs, M.D., 380 Post Street, San Francisco.

## PEDIATRICS SECTION

EDITH BRONSON, M.D., Chairman,  
1289 Second Avenue, San Francisco.ROBERT E. RAMSAY, M.D., Secretary,  
Marsh-Strong Building, Los Angeles.

## FIRST MEETING

Monday, May 12, 8 p. m.

1. Chairman's Address: *Cardiac Disease in Childhood: A Problem in Preventive Medicine*—Edith Bronson, M.D., 1289 Second Avenue, San Francisco.  
Secretary's Report.
2. *Lactic Acid Milk in Private Practice*—James W. Chapman, M.D., Citizen's Savings Bank Building, Pasadena.
3. *Artificial Feeding of Breast-fed Infants*—William M. Happ, M.D., Pacific Mutual Building, Los Angeles.
4. *The Development and Re-establishment of Breast Milk by the Use of Electric Breast Pump*—Earl M. Tarr, M.D., Westlake Professional Building, Los Angeles.
5. *Summary of Unsupervised Diets of Infants Up to One Year of Age*—Adelaide Brown, M.D., 909 Hyde Street, San Francisco; Ernest L. Botts, Stanford University Hospital, San Francisco.

## SECOND MEETING

Tuesday, May 13, 2 p. m.

1. *Synostosis of the Cranial Sutures in Infancy and Childhood*—Harold K. Faber, M.D., Stanford University Hospital, San Francisco.
2. *Empyema in Children at the Los Angeles General Hospital During the Last Ten Years*—Alfred J. Scott, M.D., 1501 South Grand Avenue, Los Angeles.
3. *Intensive Treatment of Congenital Syphilis*—Hermann Schussler, M.D., 391 Sutter Street, San Francisco.
4. *Diphtheria Immunization in Los Angeles*—Abraham Metzner, M.D., Union Bank Building, Los Angeles.

## THIRD MEETING

Thursday, May 15, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.
2. *The Work of the Los Angeles Child Guidance Clinic*—

R. P. TRUITT, M. D., 1401 South Grand Avenue, Los Angeles.

3. *Some Notes on the Psychology of Juvenile Delinquency*—Olga Bridgman, M. D., 680 Sutter Street, San Francisco.

### RADIOLOGY SECTION

(Including Roentgenology and Radium Therapy)

M. P. BURNHAM, M. D., Chairman,  
900 Hyde Street, San Francisco.

RAY G. TAYLOR, M. D., Secretary,  
302 South St. Andrews Place, Los Angeles.

#### FIRST MEETING

Monday, May 12, 2 p. m.

1. Chairman's Address and Secretary's Report.
2. *X-ray of the Urinary Tract, With Report of a Case of Congenital Unilateral Kidney* (Lantern Slides)—Francis B. Sheldon, M. D., Mattei Building, Fresno.  
The paper will deal with the various conditions that are found in the course of X-ray examination of the urinary tract, and the presentation of this case of congenital unilateral kidney.
3. *Secondary Pulmonary Hypertrophic Osteoarthropathy Associated With Metastatic Sarcoma of the Lungs*—Lloyd Bryan, M. D., 135 Stockton Street, San Francisco.  
Report of two cases. Brief review of the literature. This condition is rare in acute cases, but occasionally it occurs. Usually associated with chronic pulmonary or circulatory pathology. These are skeletal stages associated with clubfingers, as described by Marie.
4. *Metastatic Bone Carcinoma*—Lyell Cary Kinney, M. D., 415 Elm Street, San Diego.
5. *Metastatic Carcinoma Involving the Abdominal, Mediastinal and Supraclavicular Glands Treated by X-rays. Well After One and One-half Years*—Henry J. Ullman, M. D., Cottage Hospital, Santa Barbara.  
Testicle removed. Microscopic diagnosis: Teratoma. Masses in abdomen, mediastinum and left clavicular region appeared five months later. Details of treatment. No evidence of tumor after one and one-half years.

#### SECOND MEETING

Tuesday, May 13, 2 p. m.

1. *Simultaneous Stereoscopic Examination of the Two Mastoids*—James B. Bullitt, M. D., Garden City Bank Building, San Jose.  
The roentgenogram is important, if not imperative, in the determination of mastoid disease and in reaching a decision as to treatment. The otologists, however, have apparently not reached unanimity as to the value of the roentgenogram. In the end the excellence of the radiographic examination must win recognition of its usefulness. The method described is offered as an advance toward the perfection of this form of examination.
2. *X-ray Diagnosis of Disease of the Nasal Accessory Sinuses With Reference to Sphenoid and Ethmoid Diseases*—Robert A. Powers, M. D., Palo Alto.  
Discussion of present methods. Dangers of erroneous interpretations of ethmoid conditions. Cross section X-ray studies of the ethmoid cells. Unit for super-imposed studies of the bones of the skull. A practical method for examination.
3. *Calibration of Roentgen Therapy Machines in California*—W. Edward Chamberlain, M. D., Stanford University Hospital, San Francisco; Robert R. Newell, M. D., Stanford University Hospital, San Francisco.  
An ionization chamber and galvanometer have been carried to the laboratories of California doing deep roentgen therapy. Measurements have been made of actual X-ray output. Standardization factors have been calculated for each laboratory.
4. *Radiotherapy in Benign Lesions of the Uterus*—Frederick H. Rodenbaugh, M. D., 516 Sutter Street, San Francisco; Irving S. Ingber, M. D., 516 Sutter Street, San Francisco.

Comparative results of radium and high voltage

therapy singly and in combination, with comparative dosage. Indications and contra-indications. Complications, with comparison of other methods of treatment. End-results, with possible danger from malignant degeneration.

5. *Roentgen Therapy of Uterine Myoma During Pregnancy*—John D. Lawson, M. D., Woodland.

Review of the literature. Moderately hard radiation with aluminum filtration. Hard Roentgen rays with copper infiltration. Reaction of the tumor. Effect upon the fetus. General effect on the patient. Report of a case.

#### THIRD MEETING

Thursday, May 15, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.
2. *Survey of Non-Tubercular Chest Lesions*—Henry Snure, M. D., 1501 South Figueroa Street, Los Angeles.  
Survey of non-tubercular chest lesions with regard to differential diagnosis, especially lung tumors and infections. Changes in lung tissue due to deep X-ray therapy.
3. *An Interesting Case Report of Pulmonary Infarct Demonstrated by the Roentgen Ray*—Lloyd B. Crow, M. D., 391 Sutter Street, San Francisco.  
Pathology: Clinical, morbid, experimental. Anamnesis, brief. Physical findings. Laboratory, brief. Roentgen ray. Conclusions.
4. *Biological Effects Connected With Modern Deep Therapy*—Kurt F. Behne, M. D., 1407 S. Hope Street, Los Angeles.  
A resumé of the general effect of the energy of radiation upon blood and the circulatory system, and on the body metabolism. A general resumé of the importance of these body changes as produced by radiation when considered in the light of the pathology to be combated.
5. Lantern Slide Demonstration.

### TECHNICAL SPECIALTIES SECTION

RAY LYMAN WILBUR, M. D., Chairman,  
Stanford University, Palo Alto.

JOHN C. WILSON, M. D., Secretary,  
Medical Office Building, Los Angeles.

#### MEETING

Wednesday, May 14, 10 a. m.

1. Election of Section Officers and Transaction of Other Section Business.

#### California Association of Physiotherapists

HAZEL FURSCOTT, President,  
380 Post Street, San Francisco.

HILDA C. RODWAY, Secretary,  
177 Post Street, San Francisco.

Joint meeting of Technical Specialties Section with California Association of Physiotherapists.

1. President's Address and Secretary's Report.
2. *Localization of Effort in Muscle Training*—Harold D. Barnard, M. D., 2417 South Hope Street, Los Angeles; C. L. Lowman, M. D., Brockman Building, Los Angeles.
3. *Torticollis*—William A. Clark, M. D., Central Building, Pasadena.
4. *Nutrition in Children*—Herbert M. Coulter, M. D., 1949 Huntington Drive, Pasadena.
5. *Muscle Re-education Following Reduction of Congenital Dislocation of the Hip*—Howard W. Chappel, M. D., 134 South Morton Avenue, Los Angeles.
6. *Endocrines Consideration of Body Types*—Clifford A. Wright, M. D., Auditorium Building, Los Angeles.
7. Business Meeting.

Wednesday, May 14, 2 p. m.

Clinic at Children's Hospital, Los Angeles.

Wednesday, May 14, 7 p. m.

Banquet—Mary Louise Tea Rooms.

Thursday, May 15, 2 p. m.

Clinic—Orthopedic Hospital School, Los Angeles.



**California Association of Medical Social Workers**

JOSEPHINE ABRAHAM, President,  
Mt. Zion Dispensary, San Francisco.

MRS. SOPHIE MERSING, Secretary,  
Mt. Zion Dispensary, San Francisco.

**MEETING**

Tuesday, May 13, 10 a. m.

1. President's Address and Secretary's Report.
2. *Influence of Medical Social Work on Obstetrics*—Armstrong Taylor, M. D., 135 Stockton Street, San Francisco.
3. *Introduction to Medical Social Service*—Miss N. Florence Cummings, Stanford Hospital, San Francisco.
4. *Motion Picture—"The Watchful Eye"*: New York Hospital Social Service and Convalescent Work.
5. *Medical Social Service*—Percy T. Magan, M. D., White Memorial Hospital, Los Angeles.
6. *State Assistance to Its Dependent Children*—Miss Geneva S. Orcutt, Children's Agent, State Board of Control, State Building, San Francisco.
7. Business Meeting.

**UROLOGY SECTION**

LOUIS CLIVE JACOBS, M. D., Chairman,  
Flood Building, San Francisco.

FRANK S. DILLINGHAM, M. D., Secretary,  
Merchants National Bank Building, Los Angeles.

**FIRST MEETING**

Monday, May 12, 8 p. m.

1. Chairman's Address: *Unusual Problems in Surgical Prostate*—Louis Clive Jacobs, M. D., Flood Building, San Francisco.

Leukemia in prostatectomy. Report of cases. Prostatic adenoma associated with vesical diverticuli. Report of cases. Retention of urine following prostatectomy. Lantern slides.

2. *Case Report of an Unusual Type of Urinary Retention*—Wilbur B. Parker, M. D., 527 West Seventh Street, Los Angeles.

Unusual urinary retention associated with simple generalized prostatic hypertrophy both unknown and unsuspected. Retention followed attack of food poisoning, and developed features commonly noted in urinary suppression such as lethal point in blood retention products, general water-logging relieved by gradual, prolonged withdrawal of vesical contents, preparatory to successful prostatectomy.

3. *Some Important Points in the Rapid Healing, Complete Restitution of Function, and Low Mortality in Suprapubic Prostatectomy Cases*—Herbert A. Rosenkranz, M. D., W. P. Story Building, Los Angeles.

Preparatory: (1) Important prognostic points. (2) Selection of trustworthy nurses. (3) Common diagnostic mistakes. (4) Digitalization. (5) Gastrointestinal hygiene. One-stage versus two-stage operation. Anesthetics: Gas and spinal. Operative: Simplicity, dispatch, avoidance of shock. Post-operative: Patients almost as dry as ordinary laparotomy cases. Asepsis of tubing and bottle. Post-operative complications: Avoidance of hemorrhage, uremia, hiccup, epididymitis, bed-sores. Remote results. Impotence, residual urine, cystitis, longevity.

4. *Kidney Anomalies. Report of a case of Bilateral Fusion of a Supernumerary Kidney*—William E. Stevens, M. D., Flood Building, San Francisco.

Fused kidney, supernumerary kidneys. Report of a case of supernumerary kidney with fusion of the three kidneys. Lantern slides.

5. *Injuries to the Urinary Organs in Relation to Industrial Accidents*—Robert V. Day, M. D., Detwiler Building, Los Angeles; Harry W. Martin, M. D., Black Building, Los Angeles.

(1) Urethral injuries without fracture of any pelvic bone. (2) Incidence of injuries to urethra and bladder in cases of fractured pelvis. (3) Injuries to the kidney. (4) Injuries to the testicles or epididymis.

**SECOND MEETING**

Tuesday, May 13, 2 p. m.

1. *Malignant Tumors of the Kidney*—Frank Hinman, M. D., 516 Sutter Street, San Francisco; A. A. Kutzmann, M. D., University California Hospital, San Francisco.

2. *Carbuncle of the Kidney*—Charles P. Mathe, M. D., 760 Market Street, San Francisco.

(1) Portal of entry with its relation to infections of the skin, i. e., furunculosis, boils, and carbuncles. (2) Case report. (3) Pathogenesis. (4) Treatment.

Discussion opened by L. Player, M. D., 516 Sutter Street, San Francisco.

3. *The Relation of the Appendix to the Right Ureter and Kidney*—Henry A. R. Kreutzmann, M. D., 1195 Bush Street, San Francisco.

Report of three cases of appendicitis simulating urinary disease. Discussion of the anatomical relation of the appendix to the right ureter and kidney.

4. *Stricture of the Ureter With Report of Cases*—R. L. Schulz, M. D., Story Building, Los Angeles.

Etiology, histogenesis, mechanism involved. General symptoms. Findings, positive and negative. Procedures, ordinary and special. Precautions as to methods for diagnosis. Unfavorable reactions which sometimes occur with ordinary methods and how to avoid them. Treatment: The importance of over-dilatation and the mischief of insufficient dilatation. Removing foci of infection.

5. *Polyps of the Vesical Orifice; Symptoms and Treatment* (with slides)—Miley B. Wesson, M. D., 870 Market Street, San Francisco.

**THIRD MEETING**

Thursday, May 15, 2 p. m.

1. Election of Section Officers and Transaction of Other Section Business.

2. *Some Problems in the Management of Tumors of the Urinary Bladder*—Paul A. Ferrier, M. D., 2211 Mar Vista Avenue, Pasadena.

Pathology: Practical importance, clinical types, difficulties in diagnosis, prognosis. Treatment: Limitations of fulguration, diathermy, radium, deep X-ray therapy. Operable-condition of patient, operative technique, palliation. Cases, results, conclusions.

3. *Tuberculosis of the Epididymis, Vas and Seminal Vesicles*—James R. Dillon, M. D., 516 Sutter Street, San Francisco.

A review of the literature would indicate the primary focus of tuberculosis in the above organs to be in the epididymis. Recent investigation by a few urologists doing the radical operation of epididymectomy, vasectomy, and vesiculectomy has shown the seminal vesicles to be the most likely primary lesion of tubercular epididymitis. Gross pathology. Brief case reports. Conclusions. Lantern-slide demonstration.

4. *A Congenital Diverticulum of the Posterior Urethra, With Some Remarks on the Modern Methods of Investigation and Treatment of Seminal Vesiculitis*. Illustrated with Lantern Slides—Martin Molony, M. D., 1056 Sutter Street, San Francisco.

A detailed description of a congenital diverticulum of the posterior urethra in a patient with chronic seminal vesiculitis. Illustrated with lantern slides showing various views of the orifice, and with radiograms of the injected sac showing both seminal vesicles opening into it. Part Two. Seminal Vesiculitis: Some remarks on the complication that may arise in the course of the investigation and diagnosis of a case; the advantages and disadvantages of some methods of treatment, with a comparison of the modern method of injecting the seminal vesicles.

5. *Spinal Anesthesia in Urology*—J. C. Negley, M. D., Haas Building, Los Angeles.

Length of time in use, reason for spinal anesthesia, drugs used and their preparation for injection, method of injection, the immediate and remote effects, depth of anesthesia, number of cases used by us and summary.

6. *The Godino Twins*—R. H. Van Denburg, M. D., Merchants National Bank Building, Los Angeles.

Joined together since birth, manners, characteristics, adaptability of locomotion, study of their urogenital tracts, with view to separation. Photographs of different poses. Diagram to illustrate their lower intestinal tracts. Conclusions. Lantern slides.

7. *Surgical Anatomic Consideration of Male Perineum* (lantern slides)—C. Latimer Callander, M. D., 240 Stockton Street, San Francisco.

## COUNTY NEWS

### ALAMEDA COUNTY

**Alameda County Medical Association** (reported by Pauline S. Nusbaumer, secretary)—The February meeting of the Association was held on the evening of the 18th, President C. L. McVey in the chair.

Patients were presented and case reports given by W. B. Allen, Sumner Everingham, and Howard Parker.

The following program, arranged by G. G. Reinle, was given:

Lower Urinary Tract Obstructions.—E. Spence DePuy. Discussion opened by A. M. Meads.

Psychography.—A. C. Siefert. Discussion opened by W. H. Sargent.

Constitutional Effects of Lower Urinary Tract Obstruction.—Charles L. McVey. Discussion opened by Fletcher B. Taylor.

Those participating in the general discussion were: P. N. Jacobson, Q. O. Gilbert, Raymond St. Clair, W. B. Palamountain, and A. T. Piercy.

C. A. Dukes offered a memorial to our late colleague, Stephen Wythe, which was ordered spread upon our minutes and a copy forwarded to his family.

The clinic conducted by George Dock of Pasadena on February 29 was most interesting. Considering the short notice, the meeting was well attended and thoroughly appreciated by all. Those who could not attend felt that they had missed an opportunity.

The annual banquet of the Merritt Hospital staff, held March 5 at the Hotel Oakland, was a delightful affair. The decorations, mostly of blossoms, were unique and beautiful. Sixty guests were present and listened to a rare program. Prof. John Adams of the University of London was the guest of honor. His address will be long remembered. George Rothganger, chief of staff, presided.

The regular monthly meeting for March was held on the 17th, President C. L. McVey in the chair. The program was presented by the Fabiola Hospital staff, as arranged by E. W. Goodman.

#### Demonstrations

Post-appendical Subdiaphragmatic Abscess.—G. H. Liliencrantz.

Leprosy.—A. M. Meads.

Bilateral Osteomyelitis of the Mandible.—A. E. Sykes.

Pathological Specimens.—Gertrude Moore.

Radical Frontal Sinus Operation.—F. M. Shook.

#### Papers

Observations in Vomiting of Pregnancy.—J. W. Sherrick.

The Place of Surgery in Brain Injuries.—E. W. Goodman.

Radium in Gynecology.—E. N. Ewer.

These papers were discussed by E. N. Ewer, F. M. Loomis, W. B. Allen, M. L. Emerson, W. H. Sargent, and Dudley Smith.

The following outline of plan for standardization of Wassermann reaction in accordance with a resolution adopted at the regular meeting held November 19, 1923, as submitted by the committee, was unanimously adopted:

"First—A commission consisting of five members shall be appointed from the Alameda County Medical Association, who shall serve for a period of five years, one term expiring at the end of each year. The duties of this commission shall be to certify laboratories for the performance of the Wassermann reaction, and to delegate the technical duties to proper authorities. A certified laboratory is defined as—

"1. Being one under the direction of a clinical pathologist. (Note—A clinical pathologist is a doctor of medicine, devoting at least one-half of his time to

laboratory practice and having had at least one year's experience in laboratory work under the direction or supervision of a clinical pathologist.)

"2. Doing all Wassermann reactions in duplicate, with at least one set according to the method of Kolmer.

"3. Using technicians who are graduates of recognized universities, having majored in a science allied to medicine, and who have had at least six months' post-graduate serological experience.

"It is desirable to have one of the antigens used in the test in a certified laboratory, a common antigen made after the method of Kolmer.

"Laboratories desiring standardization shall make application to the commission, and upon demonstration of a proper equipment, medical director as above outlined, technicians with proper qualifications and experience, are entitled to receive certification. In order to maintain certification, a laboratory must live up to all the rules laid down by the Commission, including a proper check on Wassermanns at regular intervals."

### CONTRA COSTA COUNTY

**Contra Costa County Medical Society** (reported by L. St. John Hely, secretary)—The regular monthly meeting was held at the Abbott Emergency Hospital, Richmond, Saturday, February 23, 1924.

Doctor Southard of San Francisco, eye, ear, nose, and throat specialist, lectured on "Headache." He gave a very exhaustive analysis of the cause and symptoms of the malady. His conclusions were that 80 per cent of all headaches are caused by eyestrain. The others by various infections in other parts of the body. A free discussion followed the lecture.

The committee of censors reported on the free use of the County Hospital at Martinez for patients that were able to pay for private care, both for medical and hospital service. The secretary was instructed, by a motion of the members, to take the matter up with the clerk of the Board of Supervisors, advising them of the wishes of the Contra Costa County Medical Society.

A representative of the Aetna Life Insurance Co. was present and explained the "Group" method of medical defense. He will write an explanatory letter and mail to each of the members.

After the meeting the members adjourned to Martin's Grill for lunch. The following members were present: P. C. Campbell, J. T. Breneman, H. L. Carpenter, W. E. Cunningham, C. R. Leech, J. Emmett Clark, F. Lisle Horne, John Beard, Hall Vestal, L. St. John Hely, Southard, San Francisco.

### FRESNO COUNTY

**Fresno County Medical Society** (reported by T. Floyd Bell, secretary)—The regular meeting of the Fresno County Medical Society was held at the Nurses' Home of the General Hospital of Fresno County on the evening of March 4.

Thirty-six members and five visitors were present, as follows: Members—Doctors James, Newton, Thompson, Kjaerbye, B. Petersen, Jamgotchian, Wiese, Couey, Miller, Tillman, Wahrhaftig, Willson, Pettis, S. M. Long, Morgan, Bell, Aller, Scarboro, Lamkin, J. R. Walker, G. W. Walker, Barrett, Wheeler, Montgomery, Craycroft, Vandenburg, Sheldon, Konigsmacher, Anderson, Schottstaedt, Dearborn, C. A. Robinson, and Adams. Visitors—Doctors Jellian, Meracle, Nedgerly, H. O. Collins, Skooneberg, and Take.

Hans Barkan of the Stanford Medical School of San Francisco gave a very instructive paper on "Ocular Headaches." He divided such headaches into (1) those due to use of the eyes, and (2) those due to diseases of the eyes. He emphasized especially the importance of refraction and the value of having it done by an oculist. Discussion by J. R. Walker, Kjaerbye, and Barkan.

W. F. Schaller, also of the Stanford Medical School, presented a paper on the "Present Aspect of the En-

cephalitis Situation." This was very interesting and instructive, covering the field from etiology to treatment as far as is known.

**The Staff of the General Hospital of Fresno County** held its annual dinner and election of officers at the Hotel Californian on the evening of February 12. T. F. Madden acted as toastmaster. Talks were made by D. I. Aller and C. O. Mitchell, and Dean MacDonald of the County Welfare Department. The following officers were elected for the coming year: President, A. B. Cowan; vice-president, F. B. Sheldon; secretary, C. A. James.

W. F. Schaller of San Francisco spoke at the noon luncheon of the staff of the General Hospital of Fresno on March 4, on the subject of the treatment of Neurosyphilis.

#### HUMBOLDT COUNTY

**Humboldt County Medical Society** (reported by L. A. Wing, secretary)—A meeting was held February 21 at Eureka, with an attendance of twenty.

Election of officers for the ensuing year resulted as follows: President, O. R. Myers; vice-president, Mabel A. Geddes; treasurer, John N. Chain; secretary, Lawrence A. Wing; delegate to State Convention, Carl T. Wallace; alternate, E. L. Cottrell; committee on program, Doctors Chain, McKinnon, and Marshall.

New members elected: Mabel A. Geddes, Matthew J. Beistel, and William Warren Styles of Blocksburg. Meetings will be held the last Tuesday of each month.

The program of the meeting consisted in a discussion on Gall-bladder diseases by Doctors Quinn, Chain, Marshall, Beistel, and Wallace.

The meeting was followed by an excellent dinner and a very interesting evening, and adjourned to meet again on March 25.

#### LOS ANGELES COUNTY

**Barlow Medical Library**—The annual report of this library shows an increasing progress made during the year 1923. One of the great needs of not only the medical profession, but of the public in Southern California, is adequate library facilities. A splendid nucleus now formed by the Barlow Medical Library ought to have the very liberal and hearty support of physicians everywhere. Its importance should be brought to the attention of the public in such a way that it might have reasonable opportunity to secure annuities, endowments, and offerings of all kinds.

The trustees of the library are: T. C. Lyster, M. D., 1924 (December), to January, 1925; George Kress, M. D., 1924 (December), to January, 1925; Carl Rand, M. D., 1925 (December), to January, 1926; William Duffield, M. D., 1925 (December), to January, 1926; H. E. Schiffbauer, M. D., to January, 1927; Henry H. Sherk, M. D., to January, 1927; George Dock, M. D., to January, 1927.

Trustees-at-large to serve for one year: W. Jarvis Barlow, M. D.; Norman Bridge, M. D.; Roland E. Skeel, M. D.; Granville MacGowan, M. D.; W. W. Beckett, M. D.; F. C. E. Mattison, M. D.; Mrs. Mary E. Irish, librarian.

#### SAN BERNARDINO COUNTY

**San Bernardino County Medical Society** (reported by E. J. Eytinge, secretary)—The Society met on March 4 at San Bernardino County Hospital, twenty members being present and ten guests.

E. Avery Newton of Los Angeles gave a paper on "Cardio-Renal-Vascular Disease," illustrated by lantern slides; followed by presentation of patients, who were examined and their abnormalities discussed by Dr. Newton.

A. L. Haenszel of San Bernardino and J. Hubert Smith of Victorville were received as new members. Elgar Reed of Chino and J. W. Benners of San Bernardino have passed away.

J. A. Connell, formerly of San Bernardino, transferred to Riverside County.

#### SAN DIEGO COUNTY

**San Diego County Notes** (reported by Robert Pollock)—The regular meeting of the Medical Society of February 26 at Science Hall, Balboa Park, was one of extreme human interest. A discussion of the value of certified milk and its bearings on the local situation was staged by Doctor Wessels in connection with entry upon the local market of the New Esmeralda certified product.

Doctor Hileman opened a lively discussion from the floor by reading a paper entitled "Trachoma and Certain Cases of Conjunctivitis That Are Being Diagnosed as Trachoma." This paper touched practically upon the high spots of diagnosis and treatment and was received with great enthusiasm. The discussion following was participated in by Doctors Carrington, Dingeman, Banks, Grant, Hosmer, Lesem, Thornton, and Hileman.

Charles Brown, who has recently returned from a protracted tour of European clinics, gave a very interesting talk on some of his experiences abroad. Incidentally he highly lauded the activities of the American Medical Association in Vienna.

The new St. Joseph's Hospital, not yet completed, is already planning an extensive addition in the form of a wing with a capacity of seventy-five beds.

The new La Jolla Hospital expects to open its doors in July next.

A Mental Hygiene movement was recently organized in San Diego under the name of the Bureau of Child Guidance.

On Friday evening, March 7, many of the members of the County Society attended the lecture by Samuel G. Gant of New York City on "Local Anesthesia in Operations About the Rectum," after which adjournment was made to the refreshment room, where the company partook of the sociability and refreshments for which the medical staff of the Naval Hospital is noted.

#### SAN FRANCISCO COUNTY

**Proceedings of the San Francisco County Medical Society**—During the month of February, 1924, the following meetings were held:

Tuesday, February 5—Committee on Medicine: Some Observations on Pneumonia on the Pacific Coast—W. J. Kerr. Complications and Coincident Diseases of Pulmonary Tuberculosis—W. R. P. Clark.

Tuesday, February 12—General Meeting: Some Observations on Sacro-iliac Pain—Arthur L. Fisher. The Newer Aspects of the Diagnosis of Tabes Dorsalis—Charles E. Nixon.

Tuesday, February 19—Committee on Industrial Medicine—Osteo-Arthritis (Spine) in Industrial Injury: Etiology of Arthritis—H. H. Markel. Osteo-Arthritis of the Spine with Particular Reference to Protracted Disability—J. T. Watkins. Examination and Treatment—R. L. Dresel.

Tuesday, February 26—Committee on Eye, Ear, Nose, and Throat—Symposium on Headaches: Ophthalmology—Hans Barkan. Otorhinolaryngology—Wallace B. Smith. Neurology—Walter F. Schaller. Internal Medicine—LeRoy H. Briggs.

**St. Joseph's Hospital Staff Meetings**—On March 12 St. Joseph's Hospital staff of San Francisco witnessed a demonstration by Ethan Smith and Frank Lowe of a patient with extraordinary polyarthritic lesions.

A. S. Keenan spoke on "New Medical Ideas Noted in the Old World." Impressions on Italian, English, and German surgery and surgeons were given. European nurses were reported as doing but little of the immediate preoperative preparation of patients and laboratory work was generally done by the attending physician himself. Tying of the carotids in hydrocephalus and the expectant, eliminative treatment of eclampsia were giving satisfactory results.

F. H. Rodenbaugh spoke on "X-ray as an Aid to Early Diagnosis," illustrating with lantern slides. Gastro-intestinal and bone lesions of the head, trunk and extremities were demonstrated to show early and



accidental radiological findings of importance. P. K. Brown dwelt upon chest and abdominal radiograms as they aid the physician.

Case reports were presented by A. S. Musante; Pyloric Carcinoma and Gastro-enterostomy, William Quinn; Influenzial Meningitis, J. M. Stowell; Purulent Chest, and W. T. Cummins and C. H. Hoag, Parotid Malignancy.

The program for April 9 follows: "Avoiding Neurological Errors in General Practice," C. E. Nixon; "Blood Transfusion," Sterling Bunnell; and "Demonstrations of X-ray Plates and Pathological Secimens," L. B. Crow and C. E. Smith.

**Southern Pacific General Hospital Staff Meeting** (reported by W. T. Cummins, secretary)—The regular monthly staff meeting was held at the Southern Pacific General Hospital, Huntington Hall, on Wednesday, March 5.

The scientific program was as follows:

Our Urological Department and an Illustrated Presentation of Interesting Cases (Roentgenologic Demonstration)—G. L. Eaton.

The Incidence of Perforated Gastric and Duodenal Ulcers in 4000 Admissions—J. H. O'Connor and J. A. Guilfoil. Presented by Guilfoil. Discussed by O'Connor and P. K. Brown.

Case Report of Angiosarcoma of Liver, with demonstration of gross specimen—J. D. Humber.

Case Report of Cerebellar Tumor, with demonstration of gross specimen—P. K. Brown.

Roentgenologic Demonstration—L. B. Crow.

#### SANTA BARBARA COUNTY

**Santa Barbara County Medical Society** (reported by Alex C. Soper Jr., secretary)—At the meeting held March 10 at the Cottage Hospital, there were present twenty-one members and four internes. President Robinson in the chair.

Report being made by the secretary on the cause of the printer's failure to get out notices on time, it was moved and seconded and passed that the business with him be forthwith terminated, and transferred to the Pacific Coast Publishing Co.

Discussion on the charter, constitution and by-laws caused a motion by Ullman, seconded by Bagby, and passed, that the Chair appoint a committee to draft a constitution in accord with the requirements of the State Society. The Chair appointed Stevens, Henderson, and Ryan.

The matter of J. C. Thorpe and his projected therapeutic gymnasium was discussed at some length, and the Chair requested that the members read the letter addressed to them by Mr. Thorp, and be prepared to vote on the subject at the next meeting.

Five-minute case reports, as follows: "Extraperitoneal Cesarean for Placenta Previa," by H. F. Pierce. "Thyroidectomy in the Diabetic," by Rexwald Brown.

"Appendiceal Retention," by Henry J. Ullmann.

The paper of the evening was on "Brain Surgery," by Edward Bancroft Towne of San Francisco, illustrated with lantern slides. Discussion was participated in by Ullmann, Campbell, Nuzum, and Stevens.

Meeting duly adjourned at 10:20.

#### SONOMA COUNTY

**Sonoma County Medical Society** (reported by N. Juell, secretary)—The Society met at Santa Rosa February 21, with seventeen members present and eighteen absent.

New members: Clara Pratt Sparks, Santa Rosa; Rosco E. Hamlin, Santa Rosa; Herman W. Covey, Eldridge.

Resigned: A. R. Graham of Tomales.

Delegates elected to annual meeting of C. M. A. were as follows: Henry S. Rogers, Petaluma; alternate, F. O. Pryor, Santa Rosa.

The meeting was devoted to discussion of advertising and relation to the cults.

At the last meeting a complaint was entered against one member for unethical conduct and adver-

tising. The board of censors sustained the complaint. The member explained that he realized his error, but that he had no intention of violating medical ethics, to which he fully subscribed. He offered his apology, and the complaint was dropped. The result of the discussion was that the best way to meet the cults was to maintain a high standard of efficiency and ethics.

On Thursday, March 13, the Society held another meeting at Santa Rosa, with eleven present and twenty-four absent.

Alfred C. Reed of San Francisco delivered a very interesting address on "Vitamins and Food Deficiency Diseases."

The plan of the Child Hygiene Bureau for pre-school examination of children was adopted, and S. Z. Peoples of Petaluma appointed to represent the Society on the central committee.

Resolution of regret for the death of W. B. Hays of Sonoma was adopted.

#### STANISLAUS COUNTY

**Stanislaus County Medical Society** (reported by E. R. McPheeters, secretary)—On January 11, the Society held a meeting at Hotel Modesto, beginning with a banquet. Meeting called to order by President R. E. Maxwell.

Members present: F. R. DeLappe, John C. Cooper, R. S. Hiatt, H. M. Presler, F. J. Peters, N. G. Chipman, C. E. Finney, B. F. Surrhyne, E. F. Reamer, John K. Morris, J. C. Collins, L. D. Mottram, J. E. Hosmer, R. E. Maxwell, C. E. Pearson, E. R. McPheeters.

Committee appointed to arrange for next meeting night, Modesto High School, E. R. McPheeters and B. F. Surrhyne.

Committee appointed for March meeting in Turlock, J. C. Collins, F. J. Peters, C. E. Pearson, N. G. Chipman, and H. M. Presler.

Board of censors appointed as follows: C. I. Bemis, F. R. DeLappe, and A. J. Young.

A paper by A. C. Reed of San Francisco, on "Heart Diseases in Every-Day Practice," was very attentively listened to and discussed by the members present.

A vote of thanks was extended the speaker, and the meeting was dismissed by the president.

The February meeting was held at Modesto high school auditorium, beginning with a banquet served by the culinary department of the Domestic Science class. President Maxwell presided.

After the banquet the medical society and the ladies were entertained for a short time by folk-dancing, after which the ladies played Ma Jongg and bridge, and the medical society listened to a paper read by Frank L. Kelly of San Francisco. Twenty doctors and their wives were present.

F. W. Didier and C. H. Griswold were accepted into the Society.

A plan was accepted whereby the Health Department is to furnish toxin-antitoxin to the doctors at \$3. per.

Arrangements were made to hold the March meeting in Turlock.

#### TULARE COUNTY

**Tulare County Medical Society** (reported by Norman C. Paine, secretary)—At the meeting held January 20, the following officers were elected for the ensuing year: President, A. W. Preston (re-elected); vice-president, I. H. Betts; secretary, Norman C. Paine; censor, J. C. Paine.

The Society is planning greater activity during the coming year than in the past, and a closer relationship with the State association.

#### YOLO COUNTY

**Yolo County Medical Society** (reported by Lela J. Beebe, secretary)—The regular quarterly meeting was held March 11 at Red Cross rooms at County Courthouse, Woodland. Present: Drs. Bates, Beebe,

Blevins, Cooper, C. H. Fairchild, Lawhead, Newton, Ward, Abrent, Bransford, F. R. Fairchild, Harbinson, Keith, King, Lawson, McManus, Parsons, Poage, Rathbun, and Salter.

Program: "Report of seven recent cases of influenza with unusual symptoms"—H. J. Blevins. "Report of cases of gastro-intestinal influenza"—W. E. Bates.

Doctor Blevins' paper dealt with a group of cases occurring in Woodland, presenting the usual signs and symptoms of influenza, added to which were marked eye symptoms of sclera, photophobia, some protrusion of eyeball in most severe cases, and very severe pain in eyes and head. Five of these cases occurred in a boarding-house.

Doctor Bates' group consisted of children under six, all of whom showed severe constipation and vomiting as outstanding symptoms. The discussion of these papers brought out many interesting points in diagnosis and treatment.

Election of officers resulted as follows: President, Charles Keith, Williams; vice-president, Thomas Cooper, Davis; secretary, Lela J. Beebe, Woodland; assistant secretary, John D. Lawson, Woodland.

The Woodland Clinic has held programs as follows:

February 19—Symposium on focal infection, including medical, dental, and X-ray diagnosis and treatment.

March 18—Symposium on chronic indigestion.

The Society voted its endorsement of the effort of the State Board of Health and State Board of Education to encourage the examination of pre-school children this spring, and many of the individual members are volunteering time for this service.

Under the County Health Officer, H. D. Lawhead, a campaign for education on the value of immunization against diphtheria has been started, and the county health service is arranging clinics for such immunization in some parts of the county.

**Notice of Resurrection**—Soon after P. B. Wing came to California in 1918 from Tacoma, he began to be haunted by his own ghost, as it were. First, the Board of Medical Examiners informed him, when he sent them his annual tax, that he had died, and they tried to prove it by giving him the name of his school, date of graduation, former residence, etc. However, the doctor refused to believe even so official a record, and finally convinced the board that the report had been "slightly exaggerated." However, this did not seem to "lay the ha'nt," for as late as the A. M. A. convention last summer a number of his old friends seemed very much surprised to see him alive. Finally, the doctor decided to run the rumor to its source, and learned that in the September, 1911, issue of this Journal (seven years before he had come to California) there had appeared a notice that P. R. Wing had died at Arroyo Grande, whereas it should have been C. E. Wing.

We, of course, like to believe in the power of our Journal, but we had hardly hoped that a two-line notice published more than a dozen years ago could extend its influence so widely. Be that as it may, we are very glad to say that P. B. Wing is, and has been for many years, a member in good standing of the San Diego County Medical Society and the California Medical Association, as we hope and trust he will continue to be for many years to come.

**Phi Chi Fraternity Luncheon During State Convention**—The Los Angeles Alumni Chapter of the Phi Chi Medical Fraternity have arranged for a luncheon during the convention of the California Medical Association, in Los Angeles. The Chapter has made elaborate preparations for the entertainment of the visiting members at the University Club, Wednesday, May 14, from 12:30 to 2 p. m. It is requested that the members make themselves known at the registration bureau at the Biltmore Hotel.

#### ACKNOWLEDGMENT OF REPRINTS

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Alderson, Harry E. Heliotherapy in Psoriasis. Reprinted from the Archives of Dermatology and Syphilology, July, 1923, Vol. 8, pp. 70 and 80.

Carbon Tetrachlorid in Dermatology. Reprinted from the Archives of Dermatology and Syphilology, September, 1923, Vol. 8, pp. 411-415.

Bunnell, Sterling. Positive Pressure for Thoracic Surgery With Nitrous Oxid-Oxygen Anesthesia. Reprinted from American Journal of Surgery, October, 1923. Pages 98-105.

Bronson, E. and Carr, E. M. On Subcutaneous Fibroid Nodules in Rheumatism. Reprinted from the American Journal of the Medical Sciences, June, 1923, No. 6, Vol. CXLV, p. 781.

Carr, E. M.

See Bronson, E.

Chamberlain, W. E.

See Moody, R. O.

Cohn, Robert D. A Few Notes on Halle's Clinic, With Especial Reference to His Endonasal Surgery. Reprinted from the California State Journal of Medicine, January, 1924.

Cole, William. Acute Barbitol (Veronal) Poisoning. Reprinted from The Journal of the American Medical Association, February 10, 1923, Vol. 80, pp. 374 and 375.

Adolescent Hyperthyroidism. Reprinted from Archives of Pediatrics, October, 1923;

and Sutton, Irwin C. Hyperthyroidism With Associated Diabetes Mellitus. Reprinted from Annals of Surgery, February, 1923.

Dillon, James R. Pre-Cancerous and Early Cancerous Lesions of the Genito-Urinary Tract. Reprinted from the California State Journal of Medicine, April, 1923.

Gelston, Clain Fanning. Mental Hygiene in Health Centers. Reprinted from "Mother and Child," Vol. 3, No. 2, February, 1922. Published by the American Child Hygiene Association, Baltimore, Maryland.

Gilson, Thomas E.

See Kutzmann, Adolph A.

Gilman, Philip K.

See Schaller, Walter F.

Hoag, Ernest Bryant.

See Williams, Edward Huntington.

Hoobler, Hal R.

See Lucas, William Palmer.

James, Laura.

See Jones, Martha R.

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**Board of Medical Examiners, State of California** (reported by C. B. Pinkham, M. D., secretary)—At the meeting of the Board of Medical Examiners held in Los Angeles, February 18 to 21, 1924, approximately 200 applications for reciprocity were considered, about 50 oral examinations were conducted, and 54 applicants wrote the three-day examination, most of whom were applicants for a physician's and surgeon's certificate.

A number of legal hearings were conducted, which resulted in the following penalties being imposed:

Heinz George A. Hummel, M. D., illegal operation; license revoked.

August Stone, M. D., illegal operation; license revoked.

George E. Thwaites, M. D., narcotic conviction; license revoked.

Several petitions were presented for restoration of licenses heretofore revoked.

The special investigation committee appointed to check up on the diploma-mill exposé, presented a comprehensive report of about sixteen pages, incorporating certain suggestions for legislation whereby the activities of the diploma-mills and their products may be curbed. The committee was directed to continue its activities and investigations.

Reports of various committees, as well as the investigation and legal reports were submitted, showing the activities of these departments, always summarized in the annual report of the secretary, and printed in each annual directory.

## Utah State Medical Association

**Salt Lake County Medical Society** (reported by M. M. Critchlow, secretary)—A regular meeting of the Salt Lake County Medical Society was held at the Salt Lake County Hospital February 25, President A. A. Kerr presiding. Seventy-six members and twenty-four visitors were present.

Guy Van Scoyoc read a paper on the "Treatment of Tuberculosis by a Calcium Preparation Administered Intravenously," going into the metabolism and physiological action of calcium, the chemistry of the preparation used, and therapeutic effects. He presented cases which showed marked improvement in their pulmonary condition following administration of the preparation. This paper was discussed by Straup, McHugh, Vico, Groesbeck, Jellison, and Behle.

W. C. Cheney presented a case of Spastic Diplegia in an infant six months' old, and a case of Chronic Adhesive Pericarditis in a boy of eight years.

Roy Groesbeck presented a case of Empyema following Pneumonia treated by the closed method, with apparent cure but later recurrence. This was discussed by Straup and Behle.

Doctors Maddison and Miller presented a patient who had had Trichiniasis thirteen years ago. The patient recently developed appendicitis, and on operation a piece of abdominal muscle was removed, and cysts containing trichinae were found in the muscle. These were demonstrated under the microscope.

F. J. Curtis presented a case of Epilepsy Petit Mal Type, With Psychic Equivalents, which was very interesting from a medico-legal standpoint. He also presented a case of General Paresis with simple deterioration.

J. E. Tyree presented a case of Perthe's disease. This patient had several brothers and sisters with the same disease. He discussed the pathology, treatment, and differential diagnosis. Discussion by Tynedale and Straup.

L. N. Ossman presented a case of Tuberculosis of the Spine With Paraplegia with complete relief of the paralysis, following immobilization of the spine.

F. E. Straup presented a case of gunshot wound of the liver. George Roberts showed an interesting chart of a patient with measles and erysipelas.

Application for membership by Newton Miller was read and referred to the Board of Censors. Burtis F. Robbins and S. H. Besley were unanimously elected to membership in the Society, sixty-two members voting.

Doctor Calderwood reported for his committee, which was appointed to investigate institutions caring for charity patients. He recommended that the City Board of Health be petitioned that the Baby Clinic be discontinued until a better plan could be adopted, after which reorganization might be effected. He also recommended that the president be authorized to appoint a committee of three to plan the new organization of the clinic. Doctor Galligan moved that the report be accepted, seconded by J. Z. Brown, and carried.

John Z. Brown spoke of the effort to have the Harrison Narcotic laws modified and the physicians' income tax reduced, and made some suggestions to the physicians in filling out their income tax returns.

A. J. Hosmer reported for the committee appointed to confer with the Civic Center relative to a course of instruction in home nursing, and recommended that the Society endorse a schedule of lectures to be given. He also recommended that another committee be appointed to investigate the feasibility of having introduced into the local hospitals a shorter course of training for the preparation of nurses' aids, or practical nurses. Doctor Calderwood moved the adoption of the report, seconded and carried.



After adjournment at 10:15 p. m., refreshments were served by the hospital nurses.

**Minutes of Meeting Held March 10**—The Salt Lake County Medical Society met at the Commercial Club, Salt Lake City, Utah, March 10, with sixty-six members and five visitors present, President Kerr presiding.

The minutes of the previous meeting were read and accepted without correction.

Clarence Snow reported three children immunized against measles by injection of serum from a convalescent case.

Doctor Holbrook presented a very interesting clinical case of osteitis fibrosa involving many bones. X-ray films of the case were presented by Mr. Thody. Discussed by Llewellyn and S. H. Allen.

Doctor Schulte reported a case which died of general carcinomatosis, the original tumor involving the bladder. Pathological specimens were shown.

The first paper on the scientific program was entitled "Diagnosis and Treatment of Peptic Ulcer," by George A. Cochran. Physiology of the stomach, symptoms, complications, and Sippy treatment for ulcer were dealt with. Discussed by S. H. Allen and W. L. Lindsay.

The second paper was "Diseases of the Cornea," by F. M. McHugh, in which he set forth clearly the anatomy of the cornea. He gave a classification of the ulcers of the cornea, symptoms, complications, and treatment. He also dealt on wounds of the cornea and the treatment of some of the complications by injection of foreign proteins. This interesting paper was discussed by E. M. Neher and L. W. Snow.

Transfer card recommending J. W. Henderson from the Weber County Medical Society, and his application were read. Doctor McHugh moved that the Society vote on his application for membership by transfer at this meeting. Seconded and carried. Doctor Henderson was elected to membership by transfer, forty-eight members voting.

Newton Miller was elected to membership, forty-eight members voting. The applications for membership of Eskelson and Jones were read and referred to the Board of Censors.

A letter from Chief of Police Burbidge, requesting physicians to pay their annual fee of \$5 for the three-hour parking privilege, was read.

Doctor Calderwood reported for his committee that they had decided that the best method of handling the baby clinic was to turn it over to the community clinic, so that proper investigation of the patients could be made, the clinic to be under the care of pediatricians in rotating services. He recommended that the community clinic take over the baby clinic. This report was discussed by Helmina Jeideli, who said that, in her opinion, if this were done, it would pauperize the patients, so that many babies who, under the old system were being taken care of, would not be brought to the clinic, and felt the clinic should be continued as heretofore. Doctor Scott moved that the report of the committee be accepted. Seconded by J. Z. Brown. Carried.

The editor wishes the secretaries of the other County Medical Societies in Utah would furnish as excellent reports of their meetings as those furnished by Critchlow for the Salt Lake Society. Also any other items of interest. California and Western Medicine is your official publication, and should reflect your activities fully, as it will do if you will co-operate to the extent of sending the material.

**Annual Meeting to be Held June 19, 20, 21**—The officers and committee on Scientific Work of the Utah State Medical Association have set the date for the next annual Convention, which is to be held in Logan, Utah, for June, 19, 20, 21, 1924. They have secured three very excellent speakers, and expect others. The complete program will be published in a later issue of this Journal. It is anticipated that

our annual convention this year will be equal to any we have had in the past.

**Proposed Change in Amendment of the Constitution and By-Laws of the Utah State Medical Association**—It is proposed to amend the constitution and by-laws of the Utah State Medical Association, so that the calendar year shall be the fiscal year. As the amendments now read, the fiscal year ends March 31, and it is proposed to have it end December 31. This will mean that all dues for the calendar year must be paid January 1 for that calendar year, and all dues not paid by that time will constitute a suspension of the members on the rolls of the Association. The members may be reinstated by payment of dues at any time during the calendar year. The present by-laws provide that a member shall not be suspended before March 31, so that members are carried on a three months' period of grace. The American Medical Association has adopted the calendar for its fiscal year, and has advised the various State associations to do the same. This matter was referred by the last meeting of the House of Delegates to the council for consideration and recommendation. The council has considered, and now recommends to the Association that such action be taken. If the proposed amendment is adopted, it will change the words in Chapter 9, Section 11, from March 31 to January 1, and in the same paragraph, Section 13, the words, "on or before March 31" to "on or before January 1," in two places, namely, line 7 and line 13.

**Increasing Complexities of Medical Science**—In an address before the Cincinnati Academy of Medicine, Ray Lyman Wilbur said, among other things (Cincinnati Jour. Med.): "Medicine fifty years ago was a simple personal relationship between the patient and the doctor. But the minute the laboratory became essential, medicine changed materially. Commercial medical schools had to drop out and university training came in. We have been trying to obtain a combination of the laboratory on the one side, bringing in new facts, and the art of medicine, or the application of those facts to the individual, on the other side. We have seen the most interesting period we will ever see in medical education."

"What results have obtained? I will say quite frankly that I think we have gone too far in the process of bringing the laboratory into the undergraduate medical school; too far in our standardization of medicine, until we really are in some danger."

"... We have gorged the medical curriculum. There has been an enormous growth of medical knowledge and with it a marked increase in the time requirement of the medical curriculum. There has been an increase in the time of premedical preparation, and also constant acquisition of an increased number of professorships and specialists within different departments, each one crowding in until in one of the oldest medical schools in this country there is required 5967 curriculum hours in the four-year course. Think of the absurd position in which the medical student is placed. He is like a young bluejay who sits with his mouth open for something to be poured in. With 5967 hours of work, think of the ingestion; think of the digestion required; in some in regurgitation lies his only safety."

"... There is no one so charitable as the physician, and no one more foolish in his charity. He is still in the state of handing out quarters to beggars. It does not help the recipient fundamentally, and it does not help the community, but he does it out of the goodness of his heart. Sometimes it is the wise way to do, but usually not."

"... The greatest mistake the doctor can make is not to put his hands on the patient. The laboratory is for service and not to stand between the doctor and his patient. Human sympathy is not developed and faith is not generated by studies of the urine and sputum. The doctor must make a real and thorough physical examination."

## Nevada State Medical Association

Our next annual Nevada State Medical Association meeting is to be held at Bowers Mansion, Friday and Saturday, September 12 and 13. And on Sunday the 14th, we are to take an automobile or airplane ride to Lake Tahoe or some other nearby famous, beautiful and interesting place or places. Saturday, beginning about 8 p. m., we will have a cabaret dance at Bowers Mansion, twenty miles south of Reno, on the highway to Carson City. Ample transportation from the Golden Hotel or the M. D.'s offices in Reno will be provided.

This is to be our best year in attendance and program. If you fail to come, you know you will be sorry. If you come, you will always be glad for several reasons. It would strengthen our State and National organizations and be a local help to some physicians and their patients as well, if you who are not organized would form county or community medical societies composed of one or more counties. The fundamental essential qualifications for thorough organization are membership, scientific interest, and money.

We already have enough papers offered to keep us busy both days, Friday and Saturday, the 13th and 14th.

Usually we have had offers of papers galore a few weeks before our meeting when too late to accept the offers. This year we are early in completing our list, so the program is finished unless someone notifies us he cannot come. However, we might squeeze in a clinical case or two during program hours. And those who have offered papers are urged to present clinical cases during their allotted time.

On the night of our business meeting (Friday at the Chamber of Commerce Hall, in Reno), we will have a reel of movies showing something of value and interest from a noted surgeon from Illinois.

Governor Scrugham has appointed the following people for the Board of the Child Welfare Division of the State Board of Health: Horace J. Brown, M. D., Reno; A. J. Hood, M. D., Reno; Mrs. W. A. Shockley, Reno; Mrs. Frank E. Humphrey, Reno; and Mrs. Sarah George, Sparks. This department functions under the Sheppard-Towner Act.

The Military Affairs Committee is maturing rapidly. The Government wants all who are eligible to join the Reserve Corps. Our State president is re-enlisting, although years ago he swore off.

The Surgeon-General has sent us a list of seven Nevada M. D.'s who are now members of the Medical Officers Reserve Corps. He is very anxious to secure membership in the Reserve Corps from all eligible M. D.'s in our State. If you want an application blank, let your secretary know and it will be mailed.

If your dues are not paid before April 1, you will be reported to the A. M. A. as a non-member.

M. H. Crocker has moved from Winnemucca to Oakland, Calif., with offices in the Hutchinson building.

**Washoe County Medical Society** (reported by Vinton A. Muller, secretary)—A regular meeting of the Washoe County Medical Society was held at the Commercial Club, Reno, Nev., on Tuesday evening, March 11, with an attendance of over fifty members. President R. H. Richardson presided at the meeting. The Society was honored with the presence of Howard C. Naffziger, clinical professor of neurological surgery at the University of California, who presented to the Society two very interesting papers. The first paper explained in detail the results obtained by ventriculography, and was illustrated with lantern slides. Following this, Naffziger presented a motion picture reel of peripheral nerve injuries among the war veterans treated at the Letterman

General Hospital. All other business was dispensed with except the voting on an amendment to the Constitution and By-Laws, providing that our regular meeting night be changed from the first Tuesday of each month to the second Tuesday of each month, which was carried.

The applications for membership from Alice Thompson, Reno, and W. H. Riley, Gold Hill, were voted upon and both elected to membership. The applications of Ira J. Sellers and Frank L. Barrows, both of Reno, were submitted to be voted upon at the next meeting.

A letter from Mrs. George McKenzie, expressing appreciation for the floral offering and words of sympathy sent by the Society, following George McKenzie's death, was read.

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**Medicine and Physicians in Europe**—"It is customary in France for the different faculties to take turns in delivering the address at the reopening exercises of the university each year. This year at the University of Strasbourg, the honor fell to the medical faculty, and Prof. G. Weiss, dean, was selected to give the address," writes the Paris correspondent of the Journal of the American Medical Association. "He took as his subject, 'Medicine and Physicians.' He spoke first of popular misconceptions in regard to medicine and the peculiar opinions that one frequently hears expressed about physicians. Speaking then of patients, Weiss expressed astonishment over the frequent lack of confidence in the men who have devoted their lives to acquiring the knowledge of their predecessors and to developing new knowledge in the field of medicine, and the trust that is placed in ignorant charlatans, whose influence is based on idle gossip, on man's love for the mysterious, and on his feeling of contempt for a man who frankly admits that there is no absolute certainty that he can prevent a mortal from dying. To judge from the conversations one hears on street-cars and trains, one might suppose that everybody was versed in medicine except the physician. The public is at times fascinated by the empiricist, who claims to have secret remedies for all diseases, in spite of his clumsiness and often absurdity. The remarkable thing is the tenacity of his faith, which persists in spite of the occurrence of disappointments and accidents. Every day our clinics are thronged with unfortunate men and women whose condition is hopeless because some charlatan promised to cure them at a time when the disease was still amenable to treatment, and keeps them from the hospital until the condition is hopeless; he then sends them only to avoid being held responsible for his misdeeds. The credulity of the public is such that some physicians—the apaches of our profession—actually conceal their doctor's title and carry on what appears to be an illegal practice, and beg the police not to divulge the fact that they hold a medical diploma, for fear they will lose some of their clients who are destitute of sense."

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**Metabolic Mechanism in Beriberi**—William D. Fleming (The Philippine Journal of Science, November, 1923) says, in concluding his research upon this subject:

1. In a series of beriberi patients the basal metabolic rate was found to be the same as in normal controls. The respiratory quotients were normal. With the percentages of heat obtained from the combustion of protein, of fat, and of carbohydrate, they point to a normal utilization of the food eaten. No evidence of the high carbohydrate intake as a disturbing factor was found.

2. Blood-sugar values were against the high carbohydrate intake causing a "diabetic tendency."

3. No evidence was found of damage to the excretory power of the kidney in beriberi, either in patients with oedema or in those without this symptom.

## BOOK REVIEWS

**Pediatrics.** By various authors. Edited by Isaac A. Abt. Vols. 1 and 2. Illustrated. Philadelphia and London: W. B. Saunders Company. 1923.

The publication of the first two volumes of Abt's "Pediatrics," the first American system since Keating's Encyclopedia (1889), is a medical event of the first importance. If the promise of the first two volumes is carried out in the remaining six, there can be no doubt that Abt's "Pediatrics" will fill the need better than any similar work in English.

Of the many excellent monographs, only a few can be mentioned here. Garrison's History of Pediatrics is the most complete thing of its kind with which the reviewer is familiar, embodying a wealth of interesting material on the hygiene, pathology, and therapeutics of childhood from the earliest times to the present day, and a very complete bibliography which will be of great value to those who wish to review special phases of the history of medicine.

The review of predisposition and heredity by Little of Cold Springs Harbor presents in detail the present-day knowledge of a subject which is fundamental to an understanding of physical and mental development, and which, unfortunately, is not always directly accessible to study and appraisal in the current medical literature.

To the medical man wishing to acquaint himself with the many important differences between the anatomy of childhood and that of adult life, Scammon's chapter will be most useful. The subject is presented with the greatest thoroughness, but is so arranged as to make reference easy.

The chapter by Murlin on Metabolism is, likewise, an excellent compend of knowledge on a subject to which so much fruitful research in modern times has been devoted. Robertson presents his studies and views on the principles of growth and development, elaborating his well-known conception and formulation of growth as an autocatalytic reaction. McClelland gives a brief chapter on the relation of physical chemistry to the physiology of childhood, and there are three articles on the hygiene of the home, of the school age, and of infants in general.

In the second volume, Bolt presents much interesting material on infant mortality; Levinson describes the examination and characteristics of the cerebrospinal fluid in health and disease without, it seems to us, quite exhausting the subject. Rodda has a chapter on Roentgenology, with special emphasis on fluoroscopy, giving many illustrations. The chapter on peculiarities of disease in childhood could well be omitted. DeBuys reviews prophylaxis and treatment, with good illustrations of technical procedures. The chapter on heliotherapy is largely a résumé of Rollier's work. Pearce's section on diseases of the new-born will be found valuable for reference, and Julius Hess' chapter on premature infants is excellent. One of the best articles in the second volume is Heineman's "Chemistry and Biology of Milk," in which practically all the knowledge on this subject that is likely to be of value to the medical man is presented. It is fortunate that Sedgwick lived to complete his article on breast-feeding and nutrition, giving the results of his study and experience of a subject to which he had devoted so large a part of his life, with such fruitful results. The medical world has been waiting a long time for an exposition of the subject of artificial feeding which will be correct, authoritative, complete, and practically useful. It cannot, unfortunately, be said of Brennemann's discourse on the subject—in spite of the great amount of useful knowledge which it contains—that it fills the requirement.

The introduction of insulin has caused a complete reorientation of the treatment and prognosis of diabetes. The paragraphs on this subject in Strause's

chapter on diabetes have apparently been introduced since the preparation of the original manuscript, and insulin is accordingly not given quite its proper emphasis. In other respects the chapter is an excellent one. The chapters on diabetes insipidus, sea-sickness, beri-beri, obesity, and pellagra are adequate. That on acidosis, by Howland and Marriott, is admirable. Alfred Hess covers scurvy and rickets authoritatively, in two particularly well-written papers. Wesson has a careful description, with an excellent colored plate, of acrodynia.

In general, it seems to us a pity that the loose-leaf style of publication was not adopted for this monumental work. In fixed binding it will be long before plates can be changed and a new edition published. In another edition a few of the chapters will undoubtedly be omitted, while many should be changed either to eliminate duplication of subject matter in different chapters on closely related subjects, or to admit new discoveries as they are made, or to alter opinions no longer tenable. Medical progress is so rapid that unaltered texts cannot have authoritative value or reasonable exhaustiveness for many years. We wish, however, to reiterate that there is at present no other work in English on pediatrics which has the scope or completeness of Abt's "Pediatrics."

H. K. F.

**Lectures on Endocrinology.** By Walter Timme. 123 pages. 27 illustrations. New York: Paul Hoeber. 1924. Price, \$1.50.

A good, short review of clinical endocrinology, reprinted from the Neurological Bulletin.

The author emphasizes the interrelationship of the various endocrine glands. As in all works on endocrinology, there is much theory based upon what seems a shaky foundation. A more comprehensive bibliography would be useful.

L. E.

**A Manual of Clinical Diagnosis by Means of Laboratory Methods.** By Charles E. Simon. Tenth edition. 1125 pages. Illustrated. Philadelphia and New York: Lea & Febiger. 1922. Price, \$9.

Simon is the pioneer author on clinical pathology in this country, and the tenth edition of this standard work hardly needs comment.

The previous form, in dividing the book into a part on laboratory methods and a part on findings associated with various diseases and morbid conditions, is followed.

The entire field of laboratory diagnosis is thoroughly covered. Blood chemistry methods are standard, and the chapters on blood and stool parasitology are especially noteworthy. In serology, the author gives only his own and Noguchi's Wassermann methods. It is regretted that other and superior methods, especially that of Kolmer, are not included.

Gastric and duodenal content examinations are presented in detail together with Lyon's bile studies.

While the book has grown considerably in size, it is gratifying to note a gradual deletion of obsolete and unsatisfactory methods.

E. A. V.

**A Treatise on the Diseases and Injuries of the Rectum, Anus, and Pelvic Colon.** By J. Rawson Pennington. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1923.

It is a pleasure to review a volume on diseases and injuries of the rectum, anus, and pelvic colon that is not merely a reiteration of what has been better said before, but a work that is a real addition to proctologic literature. It is the first American book that approaches the lofty standard set by Tuttle eighteen years ago. The subject matter makes easy and entertaining reading, a short history of proctology introducing the volume and a brief historical sketch introducing each chapter, thereby lending interest to what is ordinarily a rather dry subject.

The author has expended much labor and energy in collecting and sifting all the literature on rectal diseases up to the present time. The various subjects



are all dealt with in masterly fashion by one experienced in what he writes.

As a frontispiece, the author presents an original map of anal and rectal diseases, a bird's-eye view, as it were, of the entire field. It shows at a glance those affections that arise from the anal region and those that arise from the rectal region, and will be very useful for purposes of instruction. Pennington is the first author who explains so that all can understand, the difference between internal and external hemorrhoids.

The chapters on anatomy are among the best that have been incorporated in any proctology. The chapters on injuries of and foreign bodies in the rectum make very interesting reading, particularly the latter, which mentions some astonishing articles that have been inserted into the human fundamen—merely to mention one, a Rhine wine bottle, quart size.

Under neuralgia and pruritus are two chapters, short, but full of information.

Under hemorrhoids, the author gives all the time-honored methods of treatment, only to reject them in favor of his open method, which consists in cutting away the internal pile first and catching the bleeding vessels afterward. While this operation may be very satisfactory in Pennington's hands, it is bound to be very bloody when done by those less experienced, where the best rule to follow is: first tie, then cut, as in the ligature operation, which at present seems to have the preference with the majority of rectal surgeons. Whether the open operation will make a place for itself, time will tell.

Finally, there are chapters devoted exclusively to technic, where the various operations are mentioned and described, those preferred by the author being given more in detail.

While there are points where we may differ from the author, we do not hesitate to affirm that Pennington's work is by far the best that we have had the pleasure of reading in many a year, and is a decided addition to medical literature. A. N.

**Montaigne and Medicine.** Being the essayist's comments on contemporary physic and physicians; his thoughts on many material matters relating to life and death; an account of his bodily ailments and peculiarities and of his travels in search of health. By James Spottiswoode Taylor. New York: Paul B. Hoeber. 1921. Price, \$3.75.

As its title indicates, this book gives an account of Montaigne's observations and ideas on the subjects of disease, remedies, physicians. He draws his opinions from his own experience, as he was for many years a sufferer from stone in the kidney and bladder. A considerable portion of the book is taken up with an account of Montaigne's travels from watering-place to watering-place, where he went in search of relief. The reviewer found this book a little difficult to read, as he continually had to jump from one style of writing to another. For example, there would be a few observations by the author, then a quotation from Montaigne, and then a footnote of considerable length, a quotation from some other author. In this way, the continuity of the subject matter is broken, and requires the closest attention on the part of the reader to follow. The book is well printed on good paper, and the illustrations are clear and interesting. A. L. F.

**Exercise in Education and Medicine.** By R. Tait McKenzie. Third edition. 601 pages. Illustrated. Philadelphia: W. B. Saunders Company. 1923. Price, \$5.

This edition gives the reader comprehensive and reliable information presented in a scientific manner concerning an essential feature in medical practice. As a general thing, in the treatment of disease and disabling conditions, not sufficient attention is given by the medical profession to the many available physical measures that might be applicable in restoring

or improving bodily function. Especially is this true in cardiovascular conditions, and McKenzie has given us much valuable knowledge that can be utilized for better treatment. Greater emphasis, however, should have been made on the essential importance of medical supervision or exercise in education, and exercise in medicine should have been published in separate volumes. In so doing, there would be less probability for the non-medical adviser to venture in a field necessarily controlled by the physician. The injudicious "Exercise Treatment," which is universally observed, has done much to place disfavor on indicated physical therapeutics. H. L. L.

## BOOKS RECEIVED

**Operative Surgery:** Covering the operative technic involved in the operations of general and special surgery. By Warren Stone Bickham, M. D., F. A. C. S., Former Surgeon in charge of General Surgery, Manhattan State Hospital, New York; Former Visiting Surgeon to Charity and to Touro Hospitals, New Orleans. In six octavo volumes totaling approximately 5400 pages with 6378 illustrations, mostly original, and separate Desk Index Volume. Volume 3 containing 1001 pages with 1249 illustrations. Philadelphia and London: W. B. Saunders Company. 1924. Cloth, \$10 per volume. Sold by subscription only. Index Volume free.

**Text-book of Psychiatry.** By Prof. Dr. Eugen Bleuler, Director of the Psychiatric Clinic, Zurich. Authorized English Edition by A. A. Brill, M. D., Lecturer on Psychoanalysis and Abnormal Psychology, New York University. New York: The Macmillan Company. 1924.

**Louis Pasteur.** By S. F. Holmes, Ph. D., Professor of Zoology in the University of California. With Illustrations. New York: Harcourt, Brace & Company.

**Blood Pressure: Cause, Effect, and Remedy.** By Lewellys F. Barker, M. D., Professor Emeritus of Medicine in Johns Hopkins University, and Norman B. Cole, M. D., Assistant in Clinical Medicine in Johns Hopkins University. D. Appleton and Company, New York. London. 1924.

**A Physician's Manual of Vaccine Therapy.** By G. H. Sherman, M. D., Press of the Bacteriological Laboratories, G. H. Sherman, M. D., Detroit.

**The Biology of the Internal Secretions: The Endocrine Factor in Development, in Subnormalities, in Neoplasms and Malignancy, in Nervous and Mental Diseases, and in Heredity.** By Francis X. Dercum, M. D., Professor of Nervous and Mental Diseases in the Jefferson Medical College. Philadelphia and London: W. B. Saunders Company. 1924.

**The New Science of Radiocriology in Its Relation to Rejuvenation, Based on the Radiation Technique of Steinach of Vienna.** By Herman H. Rubin, M. D. Published by Medical Science Publishing Company, New York. 1923.

**Duties of Public Officials in Protection Against Quackery**—When all public health officials realize that the scope of their duty lies in protecting the folks of their community from the wiles of the incompetent, irregular and the patent medicine concerns, as well as enforcing quarantine and sanitary regulations, then and then only will there be marked progress in present-day public health programs.—Editorial Ohio State Medical Journal, March, 1924.

## Obituary



### MEMORIAL STEPHEN WYTHE

1874-1923

Classmate—Friend—Scholar

By Charles A. Dukes

As Christmas was passing, and Stephen was sitting by the fire with his family, he fell asleep. Sleep has been defined as preparation for greater work. Though we must let him sleep for this greater work, we will miss our Fellow, classmate, and friend.

The medical history of Alameda County and the State of California are closely linked with that of Stephen Wythe. His grandfather, J. H. Wythe, was the first professor of Bacteriology of Cooper Medical College, and belonged to that group of teachers composed of Lane, Cushing, and others who made medical history for California and the world. His father, also a graduate of medicine and a teacher, died when Stephen was very young.

It was in our student days at Cooper that I began to know the sterling qualities and wonderful character of Stephen, and, after his graduation, those of us who were closest to him knew of his love for his widowed mother and his wonderful care of his grandfather in his invalid days of old age; then his splendid years as husband and father and his example of fine manhood and a Christian gentleman. His service to his country during the Spanish-American War was in the navy, where he made an enviable record. During recent years he has practiced the specialty of eye, ear, nose and throat, and he will be missed by his large number of private patients, his clinic patients at the Health Center, and at the Merritt Hospital, where he was a member of the staff and gave so generously of his talents.

No man was more universally beloved and respected than Stephen Wythe, and no man more deserving.

The Alameda County Medical Society has lost a valued member, and those of us who have been near to him in his busy and active career will miss a scholar of rare qualities, always ready to help the sick and suffering with his advice.

We extend to his family our sympathies in this hour of sorrow.

## HEALTH SERVICE ISSUES ANNUAL REPORT

While stressing the need for new Marine Hospitals and the difficulty of securing medical officers for the regular corps of the Public Health Service, the Surgeon-General states in his annual report that sanitary reports indicate that general health conditions throughout the United States have continued as satisfactory as in recent years. An increasing interest in public health improvement has been noted. In these reports, year after year, it is interesting to note the shifting of emphasis, which is due in part to progress in medical science." The present report for 1923 shows that the plague work, which has heretofore been the subject of much consideration in the annual reports has, temporarily at least, practically faded from the picture. Both human and rodent plague appears to have been eradicated in the United States except for infected ground squirrels in California and all anti-plague measures in other States have been discontinued.

We are warned, however, that, owing to the difficulty of completely exterminating rats on board vessels and the present widespread dissemination of plague, geographically, there is constant danger of the introduction of this disease at all seaports engaged in foreign trade.

While typhus, plague, and yellow fever have been reported from countries with which the United States has been in constant communication, because of the enforcement of international sanitary agreements and the maintenance of national quarantine systems, no cases of major, quarantinable diseases have gained access to this country within the year covered by the report.

Twenty-five hospitals are now operated by the Public Health Service, including the National Leprosarium at Carville, La. Great advancement in the hospital standards of the Public Health Service is noted. At the same time, there has been a reduction in the per diem cost.

## DEATHS

**Benners, James Wemyss.** Died at San Bernardino, February 10, 1924, age 63. Graduate of the University of Louisville Medical Department, 1893. Licensed in California in 1915. He was a member of the San Bernardino County Medical Society, the California Medical Association, and the American Medical Association.

**Bloch, Herbert Isaac.** Died at San Francisco, March 4, 1924, age 50. Graduate of Cooper Medical College, San Francisco, 1894. He was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

**Easterday, George Spalatin.** Died at Watsonville, March 10, 1924. Graduate of the Eclectic Medical College of Cincinnati, 1878. Licensed in California in 1900. He was a member of the Santa Cruz County Medical Society, the California Medical Association, and the American Medical Association.

**Hays, Wilfred Bertram.** Died at San Francisco, March 5, 1924, age 52. Graduate of the University of California Medical School, 1906. He was a member of the Sonoma County Medical Society, the California Medical Association, and the American Medical Association.

**Thompson, J. Goodwin.** Died at Oakland, February 19, 1924, age 59. Graduate of the University of California Medical School, 1894. He was a member of the Alameda County Medical Society, the California Medical Association, and the American Medical Association.